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ART. I.—*Epidemic Typhus Fever in Ohio.* By JOHN DAWSON, M.D., of Jamestown, Ohio.

The object of this paper is to lay before the profession some facts in regard to an Epidemic Typhus Fever, as it manifested itself in some twenty-one cases, that have occurred of late in my practice.

Nineteen of these cases took place in persons of middle age. Of the remaining two, one was sixty years old, and the other was fifteen.

Sixteen of the cases occurred in males, generally of but a tolerable habit of body; and five in females, two of which

labored under a nervous diathesis, while the remaining three possessed an ordinary share of constitutional vigor.

Five of the cases were of spontaneous origin, occurring in persons who had not been exposed to any known sources of contagion. The others were able to trace the causes of their indisposition to attention upon those already laboring under the disease.

Complications.—Under this head we hardly know how to write, for so various have been the views, as we shall subsequently see, of typhus fever, not only in ancient, but to some extent in modern times, that it is next to an impossibility to consider any thing as a complication, that has not, at some period or other, been urged as a part of the disease itself. Valid, hower, as these objections may be, for the sake of convenience we will speak of the phenomena presented in these cases as complications

With hemorrhage of the bowels two cases were complicated. The hemorrhage took place in one about the fourteenth day, in the other it occurred on the twenty-first day. The quantity of blood discharged in one case was half a gallon, in the other less than half a pint. In both cases the blood came away while the patients were at stool, in a coagulated condition. Connected with these discharges, in both cases, there were paleness, a sudden feeling of weakness, and almost entire subsidence of the febrile orgasm. Although hemorrhage from the bowels has been, by some modern writers, considered as a dangerous symptom, and as one for which remedies should be immediately applied, nevertheless we regarded it, in the two cases in which it occurred, as a critical evacuation, demanding no treatment whatever except the maintenance of a quiet condition of the bowels. Viewed in this light the amendment which followed its occurrence in both cases is easily understood. But crisis, by hemorrhage from the mucous membrane of the alimentary canal is as likely to take place, if we might judge, as from the mucous membrane in any other part of the body. Glass, on the "*Method of curing fevers by Hippocrates*," says, when there

is "an heaviness, tension, heat, pain, and pulsation about the loins, the blood will rather burst out from the lower parts, and pass by the same way as the natural discharges." This author wrote his work a century or more since, but even in that age, hemorrhage from the bowels in typhus fever was looked upon as a critical evacuation. The hemorrhage lasted with intervals in one of the cases to which I have referred for sixteen hours; the other discharged blood but once. They were both treated with opium until the bowels were secured in a passive condition, which was maintained for several days, after which a laxative was administered, and they commenced convalescing.

Two cases were complicated with pneumonia. In one of these the inflammatory action was developed first in the pleura-costalis, and proceeded on, until the entire portion of both lungs was more or less involved. The patient, previous to the supervention of this inflammation, had become much emaciated from twenty or more days' illness; and perhaps, also, from the adoption of a vigorous course of purging with calomel and ipecac., designed to bring the fever to a termination. The pneumonia was treated with fomentations, cataplasms, blisters, almost to the exclusion of anything like internal remedies, except opiates and mucilaginous drinks. After the patient had recovered from this general affection of the chest, he was seized with a local inflammation in one of the intercostal spaces, so small in diameter that it could have been covered with a dollar. For this an epispastic was also prescribed, and the symptoms subsided. By these complications the illness of this patient was protracted for eight weeks. Pneumonia, so much to be dreaded in typhus, owes its origin not less frequently to the predisposing influence of the complaint, than to the agency of a strictly evacuant plan of treatment. Whatever debilitates or wastes the energy of the system in most of our continued fevers, favors the occurrence of inflammatory complications; because inflammations are almost as readily engrafted on a system very much debilitated, as on one of an opposite diathesis. Hence I consider the

purging plan of treatment adopted in this case as having a very close relation to the trouble which followed. The other case, embarrassed by pneumonia, was that of a young man of strong vigorous constitution, full habit of body, and inclined to plethora. His fever from its commencement was rather inflammatory, and marked by a pretty decisive tendency to cerebral congestion. By the use of vigorous means the integrity of the brain was preserved, but as was subsequently discovered at the expense of the chest. Pneumonia was developed during the second stage of the fever, and although it was characterized by some degree of violence, it readily gave way under the use of purgatives and counter-irritation. This patient, if bleeding be available at all in the pneumonia of typhus, might have been bled. The pulse was frequent and tolerably hard. The disease, however, being in its second stage, I chose to sacrafice the temporary and perhaps permanent advantage of blood-letting, in order to economise the resources of the system, and obey the impulses of a firm conviction, that the 'loss and gain' of blood-letting under such circumstances are pretty well balanced.

Of congestion of the brain verging very close on inflammation, there was one case. It occurred to a female in the third stage of the disease. The stupor was so profound that the patient, for three weeks, was unconscious of everything that passed. This disturbance of the nervous influence continuing so long, the adynamia induced thereby produced a tendency in the system to gangrene; and large pieces of the integuments and muscles on several parts of the body dropped out, leaving behind phagadenic ulcers. Depletions and revulsions to the head, neck, and spine, before I saw the case, had all been, in their turn, unsuccessfully applied. To give camphor a fair trial in cerebral congestion, where the opinions concerning its efficacy are so various, I considered this a proper case. It was given in three or four grain doses every four hours, with the proper intervals; and occasionally combined with an aperient portion of calomel sufficient to keep the bowels open. Under this course for the first few

days but little, if any, amendment was observed; but at the expiration of a week the efficacy of the medicine was quite palpable; and under its use with such nourishment as the digestive organs could bear, the stupor and delirium were entirely removed.

In thirteen cases diarrhœa prevailed with more or less severity. I do not mean by diarrhœa, that looseness of bowels so often attendant on typhus, and which certainly in many instances exercises a salutary influence, but I mean diarrhœa, characterized by dark watery discharges, occasionally green, in which is sometimes contained particles of the mucous covering of the bowels. Invariably the occurrence of these discharges, whether caused by medicine, or the result of disease, was attended with an aggravation of the disorder, and a rapid prostration of all the energies of the system. The pulse under its influence became frequent and feeble, the tongue red and dry, and the thirst very much increased. In a few of the cases it was accompanied with pain, in all by tenderness in the epigastrium and some degree of meteorism. Some of the cases in which this form of diarrhœa occurred had a lax state of the bowels from the beginning; it occurred to others during the second stage of the malady while under the use of the ordinary daily prescriptions, and in one or two cases it seemed to have been the result of drastic purgatives. Successfully all these cases were treated with opium and hydrargyrum cum creta. Three or four grains of the latter to one of the former was the most common prescription. In some cases however the proportion of opium was much greater, amounting to as much as three grains. This prescription was continued until the bowels yielded to its influence. In conjunction with these means I used pretty freely an infusion of slippery elm (ulmus Americana) or gum water, or flaxseed tea, as either seemed to be indicated. To the opium, however, I attributed most of the benefit derived. Nor was I prepared for confidence in the drug by previous use. Many of our elementary writers speak in doubtful terms of the efficacy of opium in cases where cerebral disturbance is at all

to be dreaded, as is usually the case in typhus. Having previously had but little experience under such circumstances, I had recourse to stimulants and astringents at first, but failing with these, I concluded to give opium a fair trial; and am compelled to say that the fears I had entertained, that it would increase cerebral congestion were not realized. Every case in which it was used had more or less stupor before the medicine was given, but this so far as could be observed was not at all increased under the largest doses administered. Schoenlein, a very sensible writer on typhus, says in regard to this subject,—'the truth is we don't yet know a specific against this pernicious diarrhœa.' He however adds, 'Nux vomica with alum and gum arabic, is perhaps, after all, the best remedy.' Of the value of this I know but little. It, however, as well as the muriate of iron, brought forward recently by Autenreith, deserves to be fully tested.

Stupor more or less profound was present in every case. So entirely general in some form or other was this symptom, that we believe with Armstrong and later writers, that the membranous envelopes of the central parts of the nervous system are affected with hyperemia in every case of typhus. Nothing short of this will be adequate to explain the invariable disturbance of the nervous influence. Usually the stupor was but slight during the first stage, but after this it gradually increased until the decline of the disease, and was apparently carried off in several cases by the occurrence of a critical evacuation. In cases of this kind it was observed that the intellect recovered its usual energy much quicker than when the disease ran its course without being characterized by a well marked crisis. Nine cases had delirium combined with the stupor. For the relief of these symptoms epispastics and sinapisms were used over the spinal axis, and it appeared that the latter were most efficacious. Indeed it seems to me, that sinapisms, or any thing else calculated to make a stimulant impression, does good, not so much by their revulsive action, as they do by exciting the capillary system of the nervous investments to unload itself, so that the nerves

can resume their normal action. This view furnishes an explanation of the superior efficacy of friction, stimulating liniments, and sinapisms over the nervous centres, in cases of muddiness of the intellect and many of the derangements connected with a congested condition of the nerves of organic life. Moreover, it furnishes a rational hypothesis upon which to account for the amendment which sometimes takes place in congestive diseases, by the use of internal stimulants, wine, camphor, etc.

Two cases were complicated with retention of urine. This troublesome symptom occurred to both after they had passed into the second stage of the disease, and had become very much debilitated. One had *previously* a hemorrhage from the bowels; in the other a hemorrhage of similar character *followed* the retention of urine. Caused as these cases evidently were by a want of muscular power in the bladder, they admitted of no relief except by the catheter. Daily both cases were relieved by this instrument, until the energies of the system by convalescence were competent to afford the necessary aid. While these cases were the only ones complicated by retention of urine, a majority of all the rest had more or less distress in micturition. This in some consisted in a lack of power to contract in the muscles of the abdomen and bladder, a smarting sensation in the urinary passages when voiding urine, and a dragging pain along the course of the uterus. These symptoms were referred to the debilitating effects of the disease, and the acrid character of the urine; and were treated with fomentations, flaxseed tea, and infusion of slippery elm. In several cases of this kind I used balsam copaiba, but with no marked benefit.

Meteorismus took place only in those cases where the virus had evidently made its deepest impression, causing the disease to be protracted. It was seldom noticed in the first stage. But after this it increased until the period of declension. To this affection, as well as a tenderness in the epigastrium, which was present in nearly every case, no treatment was specially addressed. Symptomatic, as both should be regard-

ed, of the abdominal disturbance so generally present in typhus, the only way in which they are susceptible of relief is by a remedy of the causes upon which they depend. The secretions of gas, which take place from the mucous surface of the intestines, (tympanitis intestinalis) doubtless, when there is no obstruction in the bowels, are incapable of maintaining the regular distention of the walls of the abdomen, so conspicuous, in many instances, throughout the whole course of the disease. To the secretions therefore of the peritoneum, (tympanitis abdominalis) this condition can most reasonably be attributed. Confined closely in a shut sac, the peritoneum, it is well calculated to keep up a regular distention, and impart to the walls of the abdomen a degree of elasticity. The tenderness in the epigastrium I have often treated with counter-irritation, but the control which such means has over it, has in my hands been slight. Lately, therefore, I have regarded it as being a part of the disease itself, amenable only to general remedies; and although it was present to a greater or less extent in every case, none, so far as was observed, suffered for the want of topical applications.

It has been noticed by Schoenlein, and perhaps others, that typhus is more liable to complications when it is of spontaneous origin, than when it originates from obvious sources of contagion. This, so far as my observations have extended, is true. The first one of a family attacked is apt also to have the severe form of the complaint, while among the balance the symptoms are generally more mild. I attended seven cases in one family, all adults. In the first case the disease was most protracted, and became very much complicated, while in the remaining six it ran its course unembarrassed by any obvious inflammation. These cases occurred during the winter season, a time as we might suppose, unfavorable to the influence of contagion. But although they were in a tolerably spacious building, the exhalations arising from the body, in spite of ventilation, and the efforts to keep the skin clean, became very fetid; and hence some of the visitors contracted the disorder. None, however, had it with

that degree of malignity experienced by the first. In some other instances also, where the disease appeared to originate spontaneously, the individuals first attacked suffered the most from inflammatory complications. This is very different from what might have been naturally supposed. Certainly the virus, emanating from the surface of a sick body, has the best possible chance of becoming concentrated where a number of persons are confined together in the same room. Now this being the case, persons contracting the disorder in an atmosphere of this kind ought to have it in its worst possible form. With such it should be more complicated and protracted. So far from this being the case, its opposite will more likely be found to be true. Facts of this kind must exercise some influence on our views of the etiology of typhus. More of this however in another place.

Causes, remote and proximate.—Long an object of the deepest interest and the most careful research, the cause of typhus fever, remote and proximate, still continues to be a fruitful theme of speculation. Alluded to from the earliest periods of medical record, the malady however has never been described as having an identity of its own until about the beginning of the eighteenth century. But before that time, as well as since, it was considered as originating under circumstances in many respects peculiar to itself.

It will be found by consulting the records of the profession on the remote cause of that group of symptoms to which, in modern times, the name typhus has been applied, that the older physicians gave about as much scope to their powers of conjecture as those of modern times; and perhaps with an equal degree of plausibility. The mystic or rather magic agent has been considered to be, a pestilential constitution of the air, the same in common with other '*continual*' fevers, (Hippocrates), the putrid effluvia of lakes and marshes, (Galen), 'foreign matter' or contagion operating upon a system poisoned with *lues venerea*, (Van Helmont), a *putrefying agent* which finds its way into the '*humors*' contained in the veins and arteries (Riverius), cold, changeable weather (Sanc-

torius), an epidemic constitution of the atmosphere (Sydenham), contagion (Huxham), putrid effluvia from dead animal or vegetable matter (Pringle, Cullen, Darwin, Rush, Brown), vicissitudes of temperature (Boerhaave), *malaria*, the same in common with what produces intermittents and remittents (Armstrong), an abnormal constitution of the atmosphere, in which there is a diminished quantity of oxygen associated with effluvia from animal or vegetable putrefaction (Schoenlein).

These are only a few of the conjectures which have been put forth at different eras in the profession in regard to the *remote* causes of typhus fever, jail fever, camp fever, hospital fever, etc. We call them conjectures, because all attempts to prove them true have failed. Lately, however, this subject has been approached with a degree of philosophical ingenuity by Liebig, which, like his effort on physiology, will perhaps lead to more correct knowledge concerning contagions.

He adopts the law of dynamics, proposed by La Place and Berthollet to explain the manner in which vitiated secretions act on the body in the production of fever. That law says: "*A molecule set in motion by any power, can impart its own motion to another molecule, with which it may be in contact.*" Hence says Liebig, "When putrefying muscle or pus is placed upon a fresh wound, it occasions disease and death. It is obvious that these substances communicate their own state of putrefaction to the sound blood from which they were produced, exactly in the same manner as gluten, in a state of decay or putrefaction, causes a similar transformation in a solution of sugar." "Poisons of this kind," he adds, "are even generated by the body itself in particular diseases. In smallpox, plague, and syphilis, substances of a peculiar nature are formed from the constituents of the blood. These matters are capable of inducing in the blood of a healthy individual a decomposition similar to that of which they themselves are the subjects; in other words they produce the same disease."

This purports only to show how contagious matter is re-

produced in the system, and while we regard it as the most scientific rationale that has yet been proposed, we regret that the learned author was not able to give us something equally rational on the *origin* of contagion. Relating to this subject all he says is that "several kinds of contagion are propagated through the air."

Taking the law of dynamics proposed by La Place to explain the manner in which the more contagious diseases are propagated, we can see no impropriety in applying it to many other diseases of a virulent character, where the secretions and excretions of the system become vitiated and decomposed. Indeed almost any disease of a virulent character, according to this view, may elaborate its own peculiar virus, and be propagated like an epidemic. We have had some praiseworthy efforts in our own country to prove that yellow fever, the *Western* plague, is invariably imported into our Southern and Eastern cities, that it is a Southern disease, incapable of originating in the most southern latitudes of the United States; and that it never makes its appearance as an epidemic without the virus having first been imported. Of the correctness of these opinions the profession are not at all satisfied. More observation will be necessary to settle these difficult and important points in the history of yellow fever. Generally, however, there is a belief prevalent that the disease after it has made its appearance, may elaborate its own peculiar virus and thus propagate itself. Many practitioners on the continent of Europe believe this to be the case, and also, more or less, in regard to all fevers, even puerperal.

Previously it has been remarked that the spontaneous cases of typhus, or those originating from a *constitution of the air* were more violent than those in which the disease was seemingly contracted from persons already laboring under its influence; and it has been observed by some writers in Great Britain and Germany, that typhus is more violent in the country than in the city. As it regards this violence of the spontaneous cases, it will perhaps find its best solution by considering the cause which gives rise to them, as being different from

that by which the disorder spreads through a family, camp, jail, or hospital. The former, by pretty general consent, are due to an epidemic constitution of the atmosphere, the latter probably depend upon the infectious matter generated within the body, which, while it is capable of producing a disease having all the characteristics of typhus, it nevertheless produces it in a modified form. Why the disease originating in the country should be more violent than when it occurs in a city, is a problem that in the present state of our knowledge cannot be solved. We would suppose *a priori* that the effeminate habits incident to city life would beget the most favorable condition in the system for the invasion of the virus; and, as a matter of course, it should in such cases display its most malignant effects. Such, however, is not the case, and we are left with nothing better to account for the fact, than mere speculation.

Confessedly obscure now as the *remote* cause appears to be, there are nevertheless some circumstances connected with its origin and propagation that are better understood, and are capable of being regarded with some considerable degree of certainty.

1. Typhus fever, according to present experience, is indigenous, or belongs exclusively to the northern hemisphere, and only exists in the southern by being carried there.

2. As a general rule, typhus prefers low countries. This peculiarity has been observed as being pretty constant, since Francastori first described *petechial* typhus in 1805; yet it occasionally ascends to immense heights; for example the petechial typhus of 1814–'15 went up to the highest Alps. But in such situations the cases were more rare and attended with less severity.

3. A moist condition of the atmosphere, low range of the thermometer, rapid changes in the temperature of the atmosphere, yet within certain limits, seem to be favorable for the development of the contagion.

4. Every thing calculated directly or indirectly to exercise a paralysing impression upon the nervous system, such as the

depressing passions, strong mental exertions, exhaustions of the muscular system, and exposure of the skin to wet and cold, prepares the system for an attack of the disease.

5. Personal filth, a want of wholesome nourishment, bad water, bad clothing, and everything calculated to favor putridity, as the crowding together of a number of persons in the filthy apartments of a camp, ship, jail, hospital, or in the sordid hovels of the poor, predispose the system to the influence of the virus.

6. The contagion finds the greatest susceptibility to its influence in the middle period of life, the period of the highest development of the nervous system. Hildebrand says that young children who in the general are so susceptible of contagious diseases, are seldom affected with typhus. Equally seldom is the disease met with in the aged or withered individual.

7. In a pure, free air, the typhus contagion only extends from the person affected, to the distance of a few feet, three or four; hence if proper precautions are observed in cleanliness and ventilation, the spread of the disease may always be prevented.

Imperfect as this enumeration may seem to be, it nevertheless comprises most of what we know in regard to the remote cause. Concerning the proximate, although much more important, the views of the profession are still somewhat unsettled. And though it may not minister much to professional pride to retrospect the chimerical notions of many of the ancients, yet regarded as mere matters of history, they may be profitable in moderating the dogmatical opinions, if they have any, of the more learned pathologists of the present day.

To begin with Hippocrates—he considered the proximate cause to be morbific matter in the circulating fluids; Galen, friction between the solids and the fluids by morbific matter in the blood; Bellini, lentor or viscidity in the blood; Van Helmont, excess of fermentation among the solids and fluids of which the body is composed, or 'Archeus' defiled by a foreign idea; Riverius, putrid humors in the blood; Willis, a collision

of nitre with sulphur, in the blood; Sydenham, fermentation in the blood, similar to that of the vinous in vegetables; Huxham, lentor and vapidity of the nervous juices, together with poor weak blood; Sanctorius, perspirable matter retained in the blood during the cold season of the year; Ball and Boerhaave, acrimony in the blood; Brookes, putrid fermentation in the blood; Baglivi, a venomous ferment; Pringle, Marcus and Clutterbuck, an inflammation of the brain; Hoffman and Cullen, a spasm or constriction of the capillary arteries on the surface of the body, attended with a diminished energy of the brain; Darwin, a disorder of the stomach; Brown and Rush, debility; Wilson, a change in the laws of excitability producing atony; Gregory, a defect in the functions of the brain, and spasm of the extreme vessels in every part of the system; Armstrong, a simultaneous congestion of the brain, lungs, and alimentary canal; Hildebrand, inflammation of all the mucous membranes; Broussais, gastro-enteritis with adynamia; Roederer, Wagler, Prost, M.M. Petit, Serres, Louis, Cruveilhier, Bright, and Carswell, a diminished cohesion of the solids and fluids which compose the body, and a morbid alteration of the intestinal, chiefly the Peyerian glands.

These are a few of the many opinions maintained at different periods in the history of the profession. With many, and among whom may be ranked the father of medicine, all fevers were considered as having their origin in a common cause, varied however, in form or type, by the state of the atmosphere, locality, idiosyncrasy, age, etc. But among all there is a vein of unanimity, that in the group of symptoms to which the name typhus, in modern times, has been applied, there is a putrid or adynamic condition of the system. With the older pathologists, and even down to the times of Hoffman and Cullen, this putridity was almost exclusively confined to the blood. Since their day, and perhaps from their influence, the solids have come in for a share of the credit due to abnormal action, not only in typhus, but all other kinds of fever. Now the profession stand divided, with the preponderance, probably, in favor of the solids being the prima-

ry seat of the diseased action. The truth is, without doubt, as it has been laid down by many eminent pathologists of the present age, between the two extremes. Why the fluids, that constitute four-fifths of the body, should escape, and remain uncontaminated during the course of a general disease, where the organic changes in some instances amount almost to a metamorphosis of every thing relating to the system, is so astonishing that independent of demonstration, it cannot be believed. If we can trust to recent research, the blood is identical in composition with that of flesh, (Liebig) and as a matter of consequence, liable to the same kind of lesions; or may we not, owing to the constituents of which it is composed, and their existence in the fluid state, say with propriety that it is more liable? Waving this subject for the present, we may remark that the literature of the profession, by general consent, makes the pathology of typhus to consist in an anatomical condition involving generally the lungs and intestinal canal. Constantly there is, as Armstrong has observed, more or less congestion of the mucous lining of the air passages, amounting, in many instances, to bronchitis or pneumonia. In the intestinal canal there seems nevertheless to be the most important and most constant alterations. So generally has this been observed that in his last edition of the Clinique Medicale, Andral ranges fevers under the head of abdominal diseases. The lesions are commonly found in that portion of the ileum situated near the cæcum, occasionally extending to the cæcum and colon, and consists in inflammation and ulceration of Peyer's glands. From the fact that this structural change is so invariably present, many have regarded it, rather as a part of the disease, an almost essential part, bearing the same relation to the entire disease which the rash and sore throat do to scarlatina. Whether softening of the parenchymatous substance of the different organs, the brain, heart, liver, spleen, the kidneys, the softening of the mucous membranes, the rupture of the textures of the skin, the mucous, and serous membranes, giving rise to petechiæ, vibices and effusions of blood, and the diminished cohesion of

the blood itself, are parts of the disease of an essential character, or anatomical conditions with which it is occasionally complicated, remains to some extent unsettled. If any lesion besides that of the chest and intestinal canal possesses a share in the pathology of typhus, we think it due to the nervous system. We meet with so much in a case of typhus, referable to a functional or structural disorder of the brain, such as great prostration, the different varieties of delirium, flaccitation, *subsultus tendinum*, tremors, and paralysis of the sphincters, that, with the German physicians generally, we might conclude that the nervous centres are also affected, in a manner sufficiently constant to make it a grave question, whether or not it makes up a link in the chain of morbid actions which take place in this malady.

Are typhus and typhoid fevers identical? This question, which may be regarded as dividing the pathologists of France and Britain; and to some extent exerting a similar influence among the practitioners of the United States, is one which perhaps, will remain unsettled during the present generation. We have no doubt, but that the *low* fever of Hippocrates and Galen, the *tumulus pestis* of Van Helmont, the *putrid malignant* of Riverius, the *pestilential* of Sydenham, the *malignant* of Bellini, the *putrid* of Sanctorius, the *continual putrid* of Boerhaave, the *malignant*, *goal*, *hospital* or *camp* of Pringle, the *putrid malignant* of Huxham, the *petechial* of Francastorius, the *putrid* or *spotted* of Brookes, the *mesenteric* of Baglivi, and the *typhus* or *nervous* of Cullen, Thomas, Armstrong, and modern writers generally, are identical in most of the phenomena presented, and might safely be regarded as one and the same disease, varied only by locality, different atmospheric constitutions, habits of living, etc. Concerning the prostrated putrid condition of the system, the diarrhœa, and other phenomena, now regarded as being essential to typhus fever, there is a striking agreement between the most antiquated accounts of the prevalence of this malady, and those given to us by modern writers.

But that the typhus of Armstrong and the typhoid of Louis are the same disease, is perhaps not quite so certain. Our opinions nevertheless incline to the position that they are, and the reasons for these opinions will now be submitted.

In doing this we will first give the points, in which there seems, between the two diseases, to be a resemblance:

1. Both may have an eruption, (petechiæ or sudamina) and both may prevail without any.
2. In both the prostration is alike.
3. In both the anatomical lesions of the digestive and nervous systems are much the same.
4. The bronchial and pulmonary disturbances, occasionally present in both diseases, are alike.
5. The pulse is alike in both; and the weakness of it in both diseases, without doubt, depends on softening of the left ventricle of the heart.
6. In both there is a tendency to bed-sores.
7. Both may prevail with severe anatomical lesions; and both may prevail without any at all.

On this subject Andral, in his Clinique Medicale, says that patients have perished marked with all the symptoms of *typhoid* fever, and yet there was neither exanthema, ulceratons, nor appreciable alterations of any kind in the digestive canal, the place where, of all others, alterations or changes of texture are most likely to be found.

The points in which the two diseases are said to differ are:

1. In typhus the nervous centres are principally implicated; in typhoid, the intestines.
2. Genuine typhus is reported to be highly contagious, typhoid is said to be not contagious.

With regard to the first of these reputed points of difference there is a great diversity of opinion. The nervous system evidently suffers more or less in every case of genuine typhus, and may safely be regarded as one of the symptoms which are pretty constant. Indeed the disturbance here is occasionally so great as to produce softening in the brain.

But is the brain free from disease in typhoid fever? If it is, to what are the diagnostic symptoms of this fever, as given by Andral referable? such as headache, diarrhœa, *stupor*, *delirium*, *somnolency*, etc. Demonstratively to us, the stupor, headache, somnolency, and delirium, point to lesions of the brain. And while such symptoms continue to be given as pathognomonic by the most learned in the profession, we cannot see how they can be otherwise interpreted. There is then in the disturbance of the nervous system a similarity instead of a difference between the two diseases.

Of the intestinal lesions so predominent in typhoid, the same my be remarked. Writers of the greatest antiquity speak of diarrhœa as a complication of typhus; and Van Helmont says, that the seat of malignant fevers is "in the first shops," the intestines. Dr. N. Smith, of our own country, says, that he never knew a case of typhus to terminate fatally without diarrhœa. Dr. Tweedie, however, in his Clinical Illustrations of Fever, and Armstrong in his work on Typhus Fever, give functional and structural changes of the intestinal tube as being among the prevailing lesions.—To these authors we might also add the names of Hall, Bright, Carswell, and others, perhaps not less distinguished, but we submit the matter, with what we have advanced, for candid consideration, believing that those who will take the trouble to analyse the literature of the subject, will come to the conclusion, that so far as intestinal lesions are concerned, there is no difference yet made out between the two diseases.

As it regards the other point in which there is said to be a difference, viz: that typhus is contagious and typhoid not, we think the reasoning relied upon to prove it, wants that conclusiveness adequate to produce anything like general conviction.

Invariably all who have any experience in typhus, award to it the power to propagate itself by contagion. But it also originates spontaneously, apparently from what was called in former times an epidemic constitution of the atmosphere.

Well, how will these traits compare with the disease called typhoid? In the preceding part of this paper, we showed that if we could rely upon the researches of such men as Liebig, we were compelled to admit that any disease capable of producing a decomposition of the secretions and excretions of the body, or of corrupting the fluids, might elaborate a peculiar virus by which it might propagate itself, and prevail according to all the known laws of contagion. Without, however, relying upon this general principle, we are enabled to state upon good authority, that the disease which Bretonneau calls *dothinenteritis*, which Andral calls *follicular enteritis*, which Roederer and Wagler call the *mucous fever*, which Broussais calls the *adynamic gastro-enteritis*, and which Louis, Chomel, and others call the *typhoid fever* or *affection*, is acknowledged by Lombard, Bretonneau, Gendrin, Chomel, Louis, and others, to spread and propagate itself by contagion.

Here then are all the reputed points of difference melted down by nothing more nor less than the simple process of analysis. Our reasons, *in limine*, may now be summed up for regarding the two diseases as identical: 1, because they are alike in *history;* 2, in *symptoms*, and 3, in *pathological anatomy.*

We have adverted to this subject for the purpose of eliciting inquiry concerning the character of what is called in the Western States '*Winter* fever,' '*Winter typhus*,' '*low, continued*, or remittent fever,' '*typhoid fever*,' &c., as in our opinion there is reason to suspect a closer affinity between these diseases and genuine typhus than has generally been supposed. By examining the reports of them, as they have prevailed in Ohio, Indiana, Illinois, and other Western, and also in the South-western States generally, we find that the general symptoms correspond with what in typhus we regard as pathognomonic. Dr. Carrol, now of Cincinnati, in the *Western Journal*, described a form of this fever which prevailed in Belmont county, Ohio, as early as 1814. Various indeed have been the sources from which we have received information of

its prevalence at different times. Within the bounds of my own practice I have noticed more or less of it for the last six years, and can now hear of its prevalence in other parts of the State, called by various names, and so far as its pathology is concerned being very differently regarded. Confident, as we ourselves feel, that what has prevailed under all these various names, is nothing more than the old fashioned typhus wearing a new livery according to the localities, idiosyncrasies, habits, &c., to which our population is exposed, we nevertheless feel that such a generalization ought to be made the subject of the severest criticism; and if this be grounded upon an observation of one of these epidemic fevers, or all of them together, we will cheerfully abide the issue.

Course and Termination.—Undecided to a very great extent have the profession been on this subject, since the days of Hippocrates and Galen. Many have regarded the course of typhus as amenable altogether to the laws governing inflammation, for to this in some form or other, they have imagined the pathology to be due. While others have regarded it as being under the influence of a law of self-limitation, and pretty much confined in its course to the seven days period. The seeming difference in these views, we think, by properly considering the nature of the disease, and the complications to which it is liable, is capable of being reconciled. The critical days, of which authors speak, we are willing to admit, have their foundation in a correct observance of the disease. According to Hippocrates and Galen, the greatest number of fevers terminate favorably on the 7th day, and many on the 14th. Next to these in order of efficiency, are the 9th, 11th, 20th or 21st, 17th, 5th, 4th, 3d, 18th, 27th, and 28th. In the correctness of these periods, that part of the profession, believing at all in critical days, have generally concurred. The disease so far as our own observations are concerned, has observed the seven days period, terminating at the 7th, 14th, 21st, or 28th day. Now we conclude that the disease observes these periods in its course, when, as was

remarked by an old writer of some eminence, 'it seems to have its seat everywhere and nowhere.' That it does run through its course in this way very frequently, we have testimony the most abundant. And the notes now in my own possession, taken from its prevalence among us within the past year, show a number of cases in which, from the commencement to the close, the seven days period was strictly observed.

Frequently too we have observed it pay no attention at all to periods of any kind. In cases of this kind, in the literal acceptation of the term, it prevails as a '*continual*' disease; and seems to leave the system with as much tardiness as does a chronic inflammation. What now can be assigned as the cause of this difference in termination? The true explanation of it will be found in the fact, that in addition to the proper pathology of the disease, there occasionally supervenes an inflammation, that subverts the governing law of self-limitation, and protracts the duration of the malady to a time commensurate with its own intensity and extent. In this way we account for the diversity of opinion extant on this subject; and believe that the disease may prevail according to the seven days period, or without seeming in any respect to be governed by such a law.

Can the disease be cured?—This question, if designed to inquire whether the disease is capable of being shortened in its course, or cured at any stage without reference to the laws by which it is governed, is one, that has been warmly contested. When the malady prevails in its simple form uncomplicated with any obvious visceral inflammation, it seems to be prone to run its course regardless of all the remedies that may be administered. From this circumstance many hold the doctrine that typhus has always to run through a certain cycle of changes, from which it ought not to be moved; and hence the plan of treatment, most successful with them, savors strongly of that of the *expectant.* With some it consists literally in doing nothing. Others make a show of treatment by the use of mere temporary palliatives

and trust the final issue to the occurrence of critical evacuations, in the urine, through the skin, or by furuncle, abscess, parotitis, or hemorrhage. Among this class of practitioners in typhus, can be found the names of some of the most distinguished men in the profession. Bold and vigorous as was the practice of the celebrated Rush, he, both by precept and example, inculcated, in all simple cases, the palliative plan of treatment. In his judgment the business of the physician consisted in standing as a sentinel, not to expel the enemy, not to enter a crusade against his right of possession, but to guard as much as possible the integrity of the most important parts of the invaded dominion. This plan, although often laid aside as being antiquated, and we might almost say as being criminal, for it has been called, since the time of Stahl, '*a meditation on death*,' has nevertheless, by the success which has attended it, secured no small share of confidence in modern times. Even as late as his edition of Stokes' Lectures, Dr. Bell says, "But with whatever industry and judgment we may follow up the practice, the heads of which I have just sketched, typhus will still persist in its course, after a while to take a salutary turn towards recovery and health, or to assume a more aggravated and complicated character." Different from this plan however only in a few minor points, is that pursued in Paris, the Athens of medical literature, at the present day. True, indeed, they bleed in their *typhoid affection*, in most cases, to a sparing extent. But remove this from their practice, and all the balance of their means may safely be regarded as perfectly effeminate. Distrust in the efficacy of other therapeutic agents seems to stick out of every clinical report received. This must proceed from a consciousness that the disease has a cycle of changes through which it will invariably pass; and that medicines thrust upon the system with the intention of breaking this up, are more apt to produce complication than cure. Any other explanation of the French practice, we look upon as incompatible with that boldness and eminence in other departments, for which they are so justly distinguished.

Taking it now for granted that simple typhus, like the exanthemata, has a certain course through which it will run, irrespective of any of the known agents of the materia medica, we proceed in the next place to notice what are the most available means when it is simple, and also when it becomes complicated. And here it may be remarked that in looking over the materia medica we can scarcely find an article that in typhus has not been more or less used. The limits of our remarks however will prevent us from considering, only in a brief manner, the more important, such as are calculated, from their acknowledged superior powers, to fulfil in the best manner the more important indications that in the course of the disease may be presented.

Standing foremost, if not first, among these may be ranked the preparations of mercury. Used too as this article has been by every member of the profession, from the merest tyro to the most exalted genius, there is nevertheless a humiliating deficiency in our knowledge of its utility in fevers in general, and typhus in particular, that seems almost unpardonable. Immense doses, as well to test its efficacy, as from a desire to ascertain its physiological effects, have been given during the late prevalence of cholera. But these doses, contrary to what had been the generally received opinion, seemed to act as a *sedative*, by the manner in which the vomiting and purging were allayed. Charles Bennet, house-surgeon of the Cholera Hospital at Bethnal Green, however, reports a case in which 53 drachms of calomel were administered within forty-two hours without the least sensible effect. Other cases are related, in which from large doses, the most distressing consequences ensued. Wilmer, Gmelin, and others, report cases where large doses produced not only irritation, but other effects, in many instances fatal in their character. The same diversity of opinions on the *physiological* effects of small doses obtains. Many regarding small doses as decidedly irritant, while others regard them as most free from all the objections that have been urged. "These statements," says Pereira in his late work on Materia Medica and Thera-

peutics, "appear to be almost inconsistent, and yet they are fair deductions from the experience of numerous intelligent practitioners. We must therefore," he continues "endeavor to accumulate more facts, in order to illustrate the effects of calomel, and for the present confess we have very imperfect information respecting the nature of its action."

Such are the conclusions of Pereira, the latest and perhaps most comprehensive writer on materia medica.

Of the utility of exciting the mercurial disease, in order to cure fever of any kind, our opinions have heretofore been given to the profession. All that we have to add now therefore, to those already expressed, would only go to confirm the position that such practice, as it has been witnessed by us in typhus fever, is, if we judge by the mortality attending it, extremely doubtful. Instituted at the onset of the malady before the disease has passed the period of incubation, we can readily suppose it capable of breaking up the train of morbid action and assuming for a time the control of the entire organism. But when typhus becomes seated, displaying its ravages upon the viscera of the great splanchnic cavities, like the well-forted aristocrat, it rules and governs to the exclusion of every thing else. We have made attempts to rout it, time and again; and, after wasting no little of the energies of the system, were at last foiled.

For the *hydrargyrum cum creta*, among all the preparations of mercury, we have a decided preference. Our usual mode of preparing it differs, likely, in some respects from the officinal. We have been in the habit of taking the blue mass and a sufficient quantity of prepared chalk and rubbing them together in a mortar until they make an impalpable powder, which, by varying the quantity of the blue mass may be made of any strength desired. This preparation we have used in the treatment of typhus for some years, and our confidence in its efficacy has never been diminished. We use it in all the stages of the disease, as an aperient, as well as to allay, in combination with opium, the distressing diarrhœa usu-

ally attendant. In cerebral congestion we combine camphor, and in the mucous engorgements and irritation of the air passages which frequently supervene we combine it with *pulvis Doveri.*

Prominently standing forth do we also find the preparation of *antimony*, tartar emetic. Since the time of Rasori the attention of the profession has been frequently called to the usefulness of this drug, as well in typhus, as in other varieties of fever. With the physiological effects of the medicine on the surface of the skin all are familiar. It is a powerful local irritant, and when applied to the epidermis it causes an eruption of painful pustules, resembling those of variola, or ecthyma. This being its effect when applied to the epidermis, the strong resemblance which is now universally admitted to exist between the membrane on the exterior of the body and the mucous membranes generally, even in the absence of other facts, would teach us something concerning the physiological effects of tartar emetic, when applied to the mucous membranes. But we are not destitute of some evidence on this point. We have witnessed tartar emetic pustules on the inside of the mouth, after having used a solution of the medicine for several days in succession. Further, Pereira states, "that a similar pustular eruption has been met with in the mouth, œsophagus, and small intestines from the internal use of tartar emetic, and white apthous spots have been observed on the velum and tonsils."

Having these facts before us we are prepared to estimate the value of tartar emetic in the treatment of typhus fever, which of course must vary, more or less, according to the stage to which it is applied, or the indication which it is intended to fulfil.

In the commencement of the disease, the period of incubation, the medicine, given in doses sufficiently large to produce emesis, will in many cases break up the train of morbid symptoms, and make such an impression upon the system as will entirely subvert all diseased action. To this stage of the disease the usefulnsss of the medicine is mostly confined.

We are aware, however, that Rasori and Laennec, in view of what they supposed were its '*contra-stimulant*' properties, gave it in scruple and drachm doses. But such practice, while it may be sustained above suspicion by the authors to whom we have alluded, in the treatment of violent inflammatory disease, can certainly secure but little confidence in the management of typhus, a disease in which the physiological effects of the medicine could not fail to be productive of serious mischief, by coming in contact with the mucous surfaces of the bowels, already too much predisposed to ulceration.

As a febrifuge proper, to allay or mitigate the febrile orgasm, particularly when the excitement of the heart and arteries is great, the medicine is entitled to the highest consideration. Rasori, the founder of the new Italian doctrine of '*contra-stimulus*,' was in the habit of administering small doses of tartar emetic during the twenty-four hours as an antipyrectic, in an epidemic petechial typhus which prevailed in Genoa. This practice soon found its way into France, England, and the U. States, and may now be regarded as sharing more or less freely of the confidence of many eminent physicians. The opinion is pretty general that it exercises a *sedative* influence over the circulation. But all attempts to explain its *modus medendi* are unsatisfactory. Scarcely two agree in all their views. Rasori thinks that it has the power of directly diminishing the inflammatory diathesis. Broussais ascribes its curative powers to its revulsive action on the gastro-intestinal mucous membrane. Fontaneilles ascribes it to alterations in the composition of the blood. Eberle thinks it due entirely to its sedative influence. McCartney regards it as a medicine diminishing the force of the circulation by the nausea which it occasions. Amidst all this diversity of opinion on the *modus medendi*, there is nevertheless much unanimity of sentiment among these writers on the efficacy of the medicine as an antiphlogistic, and to subdue the vascular excitement that takes place during the exacerbation of fever. Compelled as we are to grant that tartar emetic does

exercise an anti-pyrectic influence in the stage of excitement, and that it has considerable claims to the character of a febrifuge, still we think its use, in even this condition of a case of typhus fever, to be of doubtful propriety. While it would allay the febrile orgasm, it could not fail to stir up a degree of irritation in the bowels which would countervail all the advantages obtained. This objection then, founded upon its physiological effects, lies against its continued use in fever, no matter what our views are of its *modus medendi.* We know that there is a strong similarity between the mucous membranes and the skin; we know the effects of the medicine when kept in constant application to the skin, and with these data, independent of the observations to which we have already alluded, we think the effects of the medicine on the mucous surfaces, cannot easily be mistaken.

We have another view to take of tartar emetic, and that is the one to which the attention of the profession has lately been called by Dr. Graves. To do justice to his views we will give the leading symptoms, for the relief of which he believes the medicine available. In a lecture on the spotted fever epidemic in Dublin, in 1834–'35, he says: "I wish you clearly to understand, that, after the headache and cerebral excitement which accompanied the fever, had been subdued, or had ceased; after sleep and calm had returned, and continued for many days, then a new order of things commenced; *subsultus*, watchfulness, muttering, raving, involuntary discharges, &c., all denoted great derangement of the nervous system; but still there was no proof that this derangement depended on cerebral congestion. After a few, or after many days, however, unequivocal symptoms of the latter set in; the face and eyes became suffused and flushed, the pupils manifested a tendency to become contracted, and occasionally convulsions took place, the patient became totally sleepless. When the latter and dangerous period of the fever was accompanied by the former nervous group of symptoms *alone*, they yielded to wine, musk, porter, and opiates; but when the symptoms indicating cerebral congestion were su-

peradded, then it was that the case assumed so great and striking a similarity, so far as the nervous system was concerned, to the well known variety of *delirium tremens*, accompanied by cerebral congestion,—to that variety of *delirium tremens*, in fact, which can only be successfully treated by the judicious, but bold exhibition of tartar emetic, combined with laudanum." Here then it is affirmed, that when we have cerebral congestion added to the other, and we may truly say, dangerous symptoms attending the last stage of typhus, the remedy is tartar emetic and opium. Of the utility of this practice, to which Dr. Graves lays claims of originality, we know almost nothing. We do, however, respect the source from which it comes, and intend in future to give it the benefit of a fair trial. In the meantime we should have a different opinion of it, had the tartar emetic, uncombined with anything else, accomplished such good results. For while the removal of such grave symptoms, as wild, raving delirium, subsultus, muttering, and involuntary discharges, by an antiphlogistic, and that too, when they are associated with cerebral congestion, seems doubtful; we can, nevertheless, more readily understand how all these good results might have been brought about by opium *alone*. Some writers now claim for opiates the accomplishment of just such ends. We lately came to the knowledge, that some intelligent physicians of our own State were using opium as a kind of febrifuge, and, from their reports, with some degree of success. Administered in the last stage of typhus, it has accomplished more in my hands than any thing else that I have used. Small doses stimulate, while larger ones produce a sedative effect. Nor have I observed it to increase, or favor, in the manner mentioned by some writers, congestion of the brain. From circumstances of this kind we cannot see the propriety of attributing to tartar emetic the accomplishment of such important results, results too, which, if properly understood, may be due to the article with which it was combined. At any rate, such results are more in accordance with what might have been expected of opium, than of tartar emetic;

and hence, to us, the good effects, of which Dr. Graves speaks, following this preparation of antimony, in the condition of the system to which he has refered, are of a character that leaves the subject in ambiguity.

As it regards the utility of bloodletting in this affection, there is less unanimity of sentiment than upon almost any thing which has made up a part of the treatment. While some practitioners bleed by the pint, and inculcate the propriety of the practice with a degree of enthusiasm bordering almost upon the belief that it is a specific, others there are, that withhold the lancet entirely, and look upon the abstraction of blood in any stage of the disease as being decidedly contraindicated. Now that this should be the case, after so much research into the nature of the disease, and so much experience, as it regards the most successful plan of medication, is certainly very strange. In most other disorders the profession, by general consent, have agreed, either upon the indication that this agent is calculated to fulfil, or upon the particular circumstances regulating its employment. But in typhus, the recorded and unrecorded opinions are perfectly dogmatical, both for and against it. But this is not all: these practitioners alike, when called upon to sustain their positions, forestall immediately all opposition to their views, by appealing for evidence to the success of their modes of treatment. In all this there is something wrong, and the truth, without doubt, lies to some extent between the extremes.

Among the majority of writers on typhus, there is a concurrence in the opinion that it is always characterized, more or less strongly, by a putrid diathesis of the general system. This opinion is not less prevalent among our best modern writers, than among those of antiquity. This being the case, antiphlogistic remedies in general, at the head of which stands bloodletting, are certainly of doubtful propriety—contra-indicated, we might almost affirm. The remedy then, if we have any correct conceptions of its effects, could not act otherwise than detrimentally upon such a state of the system. Applied as these remarks are intended to be, to mild and sim-

ple cases, there may nevertheless circumstances arise, during the course of the malady, where sanguineous evacutions may be more reasonably sustained.

When the disease supervenes upon a young subject with full or plethoric habits, the disturbance to which the sanguiferous system must necessarily be subjected, would create, if admissible in any situation, a necessity for depletion by the lancet. But even here, we must not overlook the fact, "that the vivifying agency of the blood must ever continue to be the most important condition in the restoration of a disturbed equilibrium, which result is always dependent on the saving of time; and the blood must, therefore, be considered and constantly kept in view, as *the ultimate and most powerful cause of a lasting vital resistance*, as well in the diseased as in the unaffected parts of the body." (Liebig). This is a recognition of the propriety of sustaining the integrity of Cullen's *vis medicatrix naturæ*, which, if ever of paramount importance, is certainly so in the treatment of a disease in which, throughout the whole course, the vital resistance of the system appears to be primarily impaired.

In that variety of typhus, denominated by Armstrong and later writers *congestive*, many practitioners favor the abstraction of blood. Different, to a very great extent, are the views of the profession on the pathological condition which the term congestive, when applied to the encephalon, is meant to express. If we are to understand by the term a loaded condition of the nervous system of the neurilema surrounding the nerves of animal and organic life, the practice would differ very essentially from that which should be adopted, were we to understand the term congestive to mean a muddy, stupid, or comatose condition of the intellect, proceeding from fullness and activity of the arterial system. For the former, stimulants, something calculated to excite the torpid capillary veins to contract and disgorge themselves, would be indicated; while for the latter nothing would be so available as local and general bloodletting. We may remark here that the Germans, and some of the French, look upon this cere-

bral disturbance as being of the former character, depending on venous congestion; and hence they rely almost entirely for its removal upon stimulants. In quite a number of the cases previously noticed in this paper, the intellectual functions were very much disturbed; but looking upon this as a part of the disease, little or nothing of special treatment was instituted. The issue, however, of these cases was favorable; as much so, I believe, as in those where this symptom received more attention. The only case in which the symptoms might have been considered of a very grave character was treated with camphor, and stimulating ptisans. This treatment was instituted some five or six days after the lancet and revulsives had been used unsuccessfully; and the amendment under its influence was obvious in a very short period. It might here now be observed, that so far as our own experience is concerned, we have never yet seen a case of typhus with any grade of cerebral distress, benefitted by bloodletting either local or general. From this circumstance, no less than from the adynamic character of the disorder, we look upon the symptoms, simulating arterial excitement of the brain, as being fallacious, and only capable of being removed by the judicious use of stimulants.

As hemorrhage very frequently occurs in typhus, it has been suggested that the timely and judicious employment of the lancet is calculated to prevent this occurrence. Those who insist upon this point should recollect that the hemorrhage here is nothing more than a critical evacuation; and it would be about as philosophical, we conclude, to institute measures to suppress a critical sweat, or a critical deposit in the urine, as to attempt to anticipate or stop a critical hemorrhage. Besides, those who have adopted this practice report nothing in its favor. In the only case of typhus fever out of fifty in which he bled, Dr. N. Smith says, that he had hemorrhage.

Decidedly as we design to present our views on this subject, we do not however intend to say that patients will not get well after being bled, or that in many cases they will not recover with apparent facility. We know that in many ca-

ses there is great tolerance of the loss of blood, and that in others considerations of various kinds may justify the use of the lancet. But its use in simple cases, or to make an antiphlogistic impression upon the system, or to attempt to subdue the cerebral disturbance, or anticipate a hemorrhage, we think to be of doubtful propriety. Simple cases run their course better without bloodletting, while the cerebral disturbance will be found to be amenable to very different means; and so far as hemorrhages are concerned, granting them to be prejudicial, in any stage of the malady, which, by the by, we do not, we can see no more propriety in the hemorrhage from the orifice of a lancet, than in a hemorrhage from any of the mucous membranes. If the one is prejudicial, so must be the other. Nor do we believe that the position could be at all strengthened by appealing to the fact, that in the one case the blood is abstracted at the commencement, in the other at the close of the disease; for, if the presence of the blood is necessary to keep up and maintain the vital resistance against the encroachments of the malady, it is a matter of minor consideration, so far as the welfare of the system is concerned, at what particular time this vital resistance is disturbed or removed.

Of the value of *counter-irritation* we are, from pretty extensive use, well convinced. Merely for the purpose of subduing pain and acute inflammation, we use blisters. These, however, have not proven themselves to be as available in the sub-acute inflammation with which typhus is frequently complicated, and in the removal of the cephalalgia, stupor, coma, and delirium which usually attend severe cases, as stimulating cataplasms and mustard. Applied to the spine and nape of the neck, these means often control the pain of the nervous centres, and moderate the morbid excitement of the involuntary functions of organic life. The distress of the head too we have observed to be strikingly mitigated by the application of sinapisms, and other stimulating substances, to the nape of the neck. But counter-irritation, even in the form of stimulating frictions, constantly kept up on the extremities,

will, if instituted early in the disease, do much towards a favorable issue by keeping the excitement *in equilibrio*, and thus preventing congestions from taking place in the deep-seated organs of the body. Tepid vinegar and water, when the central heat predominates, and the skin is dry, husky, and constricted, will, if applied regularly, and wiped off with a coarse towel, not only favor the return of normal secretions in this organ, but by the derivative effect produced upon the surface lessen, to a very considerable extent, the danger of visceral inflammation. On this account we have not attended such a case of typhus for some time, without having this treatment faithfully observed; and we have thought always with the most decided benefit.

Concerning the availability of stimulants in this affection there are, as on bloodletting, widely different views. Some of our most intelligent practitioners use brandy and wine profusely throughout the whole course of the disease, while others place most confidence in means of an exactly opposite character. Our own views of the state of the system, and the pathology of the disease, together with what information we have obtained from the effects of remedies, induce us to favor the stimulant more, at any rate, than the contra-stimulant plan of treatment. Much, however, will depend upon the judgment of the physician in properly ascertaining the condition of the system to which they are applicable. In cases complicated with visceral inflammation of any kind they are, if not inadmissible, productive of but little good. It is true that we sometimes make an attempt to hold up the system of a debilitated patient with stimulants, while we unloose the fangs of an inflammation upon some vital organ, but it is very probable that the good and bad effects of such practice are pretty well balanced. The circulation in such cases, according to our observations, is generally increased in frequency and rendered more feeble. When this is the case, it may be taken for granted that the use of stimulants is contra-indicated. These agents, in the language of a late author, Pereira, are designed 'to vivify or strengthen,' and when

they produce this effect in typhus, it is seen in the fullness and slowness of the pulse, alterations in the circulation which denote that these agencies have been rightly applied.

About the relative value of special stimuli we have different opinions. Some confide almost exclusively in ammonia, while others have derived the best effects from the different preparations of alcohol. So far as we are acquainted, there has been but little said by writers upon the conditions of the system, or the indications of the disease, which would give a preference to one stimulating agent over another. There is perhaps something in the temperament of patients, or in the diathesis to which they may be predisposed, which should be regarded when making selections of a stimulant suitable to their case. And again, we know that alcohol makes its principal impression on the nervous system, ammonia on the cardiaco-vascular, and the spices make theirs on the gastro-enteritic. Circumstances of this kind will by no means justify the indiscriminate use of stimulants in all conditions. Hence, when in the course of the disease a stimulant is indicated, much will depend upon making a right selection—as much perhaps, as in making the right selection of a purgative or an emetic.

A very important agent in the treatment of typhus fever is cold water. To us it seems to have considerable claims to the character of a febrifuge. Used either externally or internally it possesses more control over the temperature of the body, than any thing with which the physician is acquainted. Our practice is to allow patients to drink *ad libitum;* and also to use it freely upon the skin when the heat is great, and when this organ is contracted. With the conditions of the system by which its use is contra-indicated all are familiar; and as we have elsewhere (Western Journal) given our views on the use of cold water in remittent fever, we shall not discuss the subject further. We however would add, that we have not seen either rheumatism or pneumonia, as a consequence of the use of cold water in typhus, as contended for by Clutterbuck. (Inquiry into the Seat and Nature of Fever).

In conclusion, it may be remarked that we have not unfrequently used cinchona and the mineral acids in the treatment of typhus, and that too for the purposes for which they have been recommended, but so far, we have not seen any thing in their effects that entitles them to much if any consideration. When administered in doses sufficiently large to produce any effect on the disorder, this has generally been prejudicial.

Jamestown, O., July 1, 1844.

ART. II.—*Surgical Cases.* By WILLIAM M. BOLING, M.D., of Montgomery, Alabama.

Cases of Injury of the Head.—In injuries of the head, the small degree of external violence necessary to produce death is frequently the cause of astonishment, to persons unconnected with the medical profession—while the trifling inconvenience at times produced by the most extensive injuries of the cranium, implicating the brain itself, to a considerable extent, is no less a source of surprise to the physician.

The two first, of the following five, are cases in point:

CASE I.—Nov. 14th, 1842. I was requested by Dr. Whetstone, of Autauga county, to meet him at the house of his father, (who lived some fifteen miles from town), for the purpose of operating on a negro boy, 8 years old, who had that morning received an injury of the head. The accident happened to him while driving the horses attached to the cotton gin, and was caused by his head being caught between two heavy pieces of timber, forming part of the machinery.

The accident happened early in the morning, and when I saw him, about 9 o'clock at night, he was perfectly rational—nor had he been otherwise since the occurrence. He was complaining loudly, however, of the pain. The principal injury was on the right side of the head, commencing near the

centre of the coronal suture, and extending obliquely backwards and outwards across the parietal protuberance—being something over three inches in length, by two inches in width—the fragments of bone depressed more than an inch, and firmly wedged in. The inner table was fractured all round, and depressed to a greater extent than the outer table; consequently the shelving portion of the latter would prevent the insertion of an instrument under the depressed fragments. A portion of the cranium, nearly as large as a man's hand, in the centre of which lay the injured part, was completely stripped of integuments, the latter thrown back and hanging by a slip about an inch wide. On the opposite side of the head, the integuments were very much bruised and lacerated, and the cranium bared in places, but not fractured; considerable hæmorrhage had taken place.

The overshelving portions of the outer table were removed with a Heys' saw, so as to admit the introduction of an elevator under the depressed portions, and sixteen fragments of bone removed. One large piece had lacerated the dura mater, and had penetrated deeply into the cerebral substance, about a drachm and a half of which had followed its removal. The lacerated integuments were replaced and confined by a few interrupted sutures, and lint, spread with simple cerate, applied over it.

During the operation he struggled and cried lustily; and after the principal part of the fragments were removed, deep inspirations were accompanied by a collapsed and sunken state of the dura mater, while the expirations were attended by so tense a condition of the same as to cause considerable anxiety, for fear that it would burst and allow of extensive protrusion of the brain.

After the application of the dressing he was put to bed, where he slept calmly and comfortably all night.

His recovery was rapid. On the second day he was found sitting up in bed; and on the third he got up unobserved and walked out. From this time he had to be carefully watched to keep him in the house. In three weeks the scalp had al-

most entirely healed, and he was allowed to play about the house at his pleasure. He had scarcely any fever, and the only medicine he took was one dose of castor oil the day after the injury was received. Neither before nor after the operation was there any paralysis.

Case II.—About 4 o'clock in the afternoon, March 10th, 1841, B. B., a lad about 13 years of age, received a blow from a stone thrown by a boy something younger than himself, with whom he had quarreled about a game at marbles. The stone struck the right side of the head near the *anterior inferior angle* of the parietal bone—making a wound in the integuments, to the bone, about half an inch long, but without producing any fracture, so far as the point could be ascertained by examination with a probe.

The immediate effect of the blow was to knock him so far down, that he fell upon his hands and knees, from which, however, he immediately recovered. He was brought to my office to have the wound dressed. I merely applied a strip of adhesive plaster, and sent him home. When brought to my office, his extremities were cool, and his pulse small and weak, and about 80. He was perfectly sensible and stood up part of the time he remained. Indeed he walked part of the way home. Though a lad of a bold and daring character generally, he appeared at this time much cowed and subdued.

In about three hours after the dressing, I was requested to visit him. I found him in a stupor, from which nothing could rouse him, or cause him to evince the least consciousness, or sensibility—breathing stertorously; pulse 60, and rather weak; extremities cool; pupil of right eye very much dilated; that of the left rather contracted; paralysis of both left extremities.

He made occasional convulsive efforts to vomit, part of the matter passing through the nostrils, and part through the mouth; but the greater portion of it apparently *falling* back the œsophagus into the stomach. I was informed that after his return home he sat up some time, conversing rationally with the family. After a while some degree of drowsiness oc-

curred, which caused him to go to bed; and in a short time he was in the situation above described.

I applied sinapisms to the epigastrium and extremities, but allowed them to remain on only a few minutes. In a couple of hours considerable reaction had taken place. His extremities were warm and his pulse about 80, full and hard, but irregular. I bled him in a full stream to 12 oz., under which his pulse softened considerably, but in the course of an hour regained its former force. Under the loss of 6oz. more of blood now, his pulse improved very much, becoming quite soft and regular. His respiration was also improved, the stupor being, for a little while, entirely removed. I took advantage of the present appearance of improvement to administer a cathartic, and mixing gr. xx of jalap and gr. x of calomel in a spoonful of thin syrup, poured it into the back part of his mouth. The larger portion of it ran passively, rather than by any effort of deglutition, down the œsophagus. In the course of the night I administered two enemata, each of which was followed by a tolerably large evacuation, both of which, together with his urine, were passed unconsciously. In less than half an hour after the second bleeding, his respiration again became stertorous, and so continued all night.

11th.—He is much as I left him last night. Pupil of right eye still very much dilated; left extremities paralysed; but he moves the right; breathing stertorous; cannot by any means be roused; skin natural, except about the head, where the temperature is a little above the healthy standard; pulse 80, soft and moderately full.

Looking upon the case as most probably one of compression caused by blood, extravasated from the middle artery of the dura mater, which I supposed to have been ruptured by the blow; and seeing no improvement produced by the depletion carried as far as the state of the pulse, &c., would admit, I proposed to trephine, in hope of being able to remove the extravasation. Before proceeding with the operation, it was proposed by his family to have a consultation. Accordingly two gentlemen of experience and high standing were called

in. During the examination, the patient made an effort, in which he partially succeeded, to open the left eye. This effort was induced by a loud noise being made close to his ear, and cold water at the same time thrown in his face.

As this was the only indication of consciousness that had been elicited from the patient since early the previous evening, it was looked upon as a favorable indication, and hopes were entertained that it was the forerunner of a better state of things. The operation was postponed, and a meeting agreed upon for the next morning. During the day, as he remained in much the same condition, little was done for him, except the application of cold lotions to his head.

At 9 o'clock at night, he had a copious evacuation from his bowels, produced by an enema; after this his pulse fell to 70, and became small and weak. It soon, however, began to increase in frequency, and by 10 o'clock on the morning of the 12th, it had risen to 140, still remaining small and weak. His other symptoms remained the same. This morning a proposition to trephine was overruled. Four ounces of blood, under the loss of which his pulse became still weaker, were abstrated from his arm, and the cold applications continued to his head. In the afternoon he had two convulsive paroxysms; the convulsive action, from what I could learn, being confined principally to the muscles of the back of the neck and throat.

He continued to grow worse, and died early on the morning of the 13th.

Case III.—Dec. 23, 1840, I was requested to go to the distance of some twenty miles, in an adjoining county, to visit, in consultation, a little boy three years old, who had the evening before received a severe injury of the head, by a kick from a mule. The injury was inflicted on the right side of the frontal bone—a portion of which, of the shape of the rounded anterior extremity of the animal's foot, two and a half inches long, and more than an inch wide in the centre, was fractured, and the rounded edge depressed nearly an inch. The part opposite the depressed edge was still adherent, having been partly bent so as to admit of the depression. The phy-

sician in attendance (Dr. Turner) informed me, on my arrival, that about half an ounce of cerebral matter had escaped from the wound.

Before my arrival the depressed bone had, by the motion of the brain against it, nearly regained its natural level. The child was able to walk immediately after the accident; and as he was perfectly sensible—there being present, likewise, neither symptoms of concussion nor compression—we did not think it proper to interfere with the bone. For some inflammatory action, which supervened on the second day, and increased on the third and fourth, an active antiphlogistic course was adopted. The patient improved rapidly after the sixth day, and in a short time the wound was more a source of inconvenience than of suffering. After the complete cicatrization of the wound, a depression about the eighth of an inch remained.

Case IV.—Oct. 19th, 1842, I was requested by Dr. Pierce to visit, with him, Ben. Narrimore, a boy 14 years old, who, about two hours before, had been thrown from a horse, and had received a fracture of the cranium by a blow from the front, sharp edge of the horse's shoe, after the fall. The injury was across the middle of the right parietal protuberance, the depressed portions of bone being about two inches long, by about an inch and a quarter wide in the middle, tapering off, narrower at each end. The deepest part of the depression was about three-fourths of an inch. He got up immediately after the fall and walked home—a distance of about a quarter of a mile.

On my arrival I found him complaining very much of pain in the situation of the wound, and of a most violent headache. He was bled freely and purged, during the afternoon and night, and water dressing was applied to the wound—himself and friends positively refusing to have any effort made to remove the depressed bones.

20th.—Almost entire loss of sensation and motion of left arm, and, to a less extent, also of left leg; pupil of right eye dilated; pulse increased in frequency, and moderately full and hard. He was again bled, and took a mercurial cathartic, fol-

lowed by some saline medicine; he still complained of excessive pain in the head. In the evening he remained much the same, with the exception of some spasmodic twitching of the muscles of the left arm, and of the left side of the face.

21st.—From the effect of bleeding and purging, his pulse, though frequent, is small and weak. The twitching of the muscles, noticed yesterday, has gradually increased, and has also extended to the left leg. He has now severe convulsions, confined mostly to the left side, (and more to the muscles of the left side of the face and left arm than to the leg) accompanied with great difficulty of breathing, and foaming at the mouth, but not with loss of consciousness. During the paroxysms, (some of which have lasted an hour) his countenance expresses great anxiety, but no want of intelligence. He makes efforts to speak, (in which he succeeds imperfectly) for the purpose of giving directions for the attendants to apply camphor, &c., to his nostrils, and for them to wipe away the foam from his mouth. Sometimes, as if fretted by their not understanding, or not immediately obeying his orders, he will grasp a handkerchief in his right hand and attempt to wipe the froth away from his mouth himself. After the paroxysms he appears weak, and much exhausted. His friends now, though given to understand that the probability of the operation proving beneficial is less than when first proposed, are anxious for its performance. The patient himself gives a reluctant consent, threatening me severely, with his fist and knife, if I hurt him much during the operation.

With a great deal of difficulty, the depressed fragments being small and pressed down in such a way as to support each other, like the stones of an arched well, after having removed with a small trephine a portion of sound bone, the pieces were removed by the aid of an elevator. Several large spiculæ, belonging to the inner table—extending considerably beyond the depression in the external table—loosened from the dura mater, but still slightly adherent by one of their extremities—were removed by the dressing forceps. One small spicula had penetrated the dura mater. Two or three interrupted

sutures, strips of adhesive plaster, and lint, saturated with cold water, constituted the dressing.

During the operation he struggled, threatened, and fought, and called vociferously for his knife, with which to make us desist.

In an hour after the operation he had quite a severe fit, followed during the night by several others less violent. Active depletion having been carried as far as seemed safe, at the suggestion of Dr. Pierce he was put upon the use of calomel, in small doses, frequently repeated, combined with occasional doses of morphine.

At first the morphine seemed to be of service, as the spasms were for a while less violent, and occurred at longer intervals; but at length it appeared to lose its influence, though given in increased doses, (about a third of a grain every 4th hour), and was accordingly discontinued on the evening of the 23d; the patient that morning having had a paroxysm of three hours' duration. The calomel was continued in doses sufficient to keep up a moderate action on the bowels. By the evening of the 25th he was slightly ptyalized; and from that time the spasms ceased. His improvement was rapid; partial paralysis of the left arm, however, continuing for several weeks.

Case V.—T. Murrell, a lad 13 years old, of a sallow, bloated and anæmic appearance, on the 6th February, 1844, was thrown from a horse and dragged about three hundred yards, by his foot hanging in the stirrup—the horse running at full speed all the time.

When he was picked up, after his foot had been freed from the stirrup, he was quite insensible, and, according to the statement of the bystanders, entirely pulseless. When I arrived, about three-quarters of an hour after the accident, I found him lying on his side, with his body bent forward, and his thigh bent forward on the pelvis—uttering scream after scream, and writhing as if in excessive pain, (apparently abdominal) and taking no notice whatever of any question addressed him. He was badly bruised on several parts of his

body, especially about the right side and shoulder, where, it was said, the horse had kicked him.

Several of his teeth were knocked out and broken off; his pulse was small and weak; extremities cool; pupils dilated, and mouth drawn rigidly to the left side. Both eyes were drawn to the left, as if from contraction of the external rectus of the left eye, and of the internal rectus of the right eye. The only appearance of injury about the head was a slight contusion on the forehead, a little to the left of the medial line, and above the superciliary ridge. Little was done for him during the night except the administration of an anodyne, as his pulse remainrd depressed, and the screaming continued.

7th.—Surface a little above the natural temperature. He remains quite stupid and continues to scream—but less frequently. Pulse weak and small; 80 in the minute. Does not lie as he did last night, with his body and thighs bent on the pelvis. ℞. ol. ricini ℥ss.

Evening.—There is as much dilatation of the pupil as I have ever seen produced by the application of belladonna. Pulse 120; rather tense; right arm cold as high as the elbow; the rest of the body hot; no evacuation; repeat ol. ricini ℥ss., and to lose ten ounces of blood; cold applications to head.

8th.—Screams less, and has sufficient sense to open his eyes and protrude his tongue when requested to do so; pupils still dilated; mouth distorted; and right arm cold, though it has been enveloped in flannel, and artificial heat applied; has had one large evacuation; repeat ol. ricini ℥ss.

9th.—Tongue dry; pulse 64, and soft; right leg as well as arm now cold; moves both slightly when pinched; but otherwise scarcely moves them at all. In other respects he remains the same; ℞. calomel gr. xx. div. in chart. vi.; one to be given night and morning.

10th.—Pulse 70, and soft; has spoken a few words rationally, this morning; continues same.

11th.—He had several operations last night, which appeared

to cause him a good deal of pain; since the operations he has been quite easy; continue calomel, &c.

12th.—Gums a little sore; pulse 76; countenance improved; pupils less dilated; ate a cracker this morning; recognizes me, but not his mother.

He continued to improve slowly. By the 10th of March he was able to go about; but his gait was awkward on account of weakness in his right leg; nor has he yet entire control over the right arm. His father thinks that his intellect is slightly impaired.

Case of Ununited Fracture.—On the 16th of November, 1841, I was called to see a very stout, robust, and muscular stage-driver, who, in driving the stage out of town at night, had upset it, suffering in consequence a fracture of one of his clavicles, and an oblique, slightly comminuted fracture of the left femur, below the middle. The limb was dressed with a roller bandage and paste-board splints, and placed in the modification of the double inclined plane, described by Dr. Nott, of Mobile, in the November number, for 1838, of the American Journal of Medical Sciences. At the end of seven weeks the limb was removed from the apparatus. The fractured part was surrounded by a large mass of provisional callus, and appeared firm. For several days he made some awkward attempts to walk with crutches, assisted by his companions; one of whom generally supported him on each side.

Dissatisfied with the slow progress he made in *relearning* to walk, and attributing it in a great measure to want of confidence, his companions one day led him into the middle of the room, out of the reach of anything by which he might steady himself, and there left him to support himself with his crutches as best he could. He tottered for a few seconds and fell.

On examining the situation of the fracture, the ends of the bone were found quite movable, though the provisional callus appeared to have sustained no injury from the fall, the motion taking place, within the callus, between the ends of the bone, as in the capsular ligament of a joint. No grating or crepi-

tus could be heard, as in a recent fracture, by rubbing the ends of the bone together.

The apparatus was re-applied. Upon examination at the end of five weeks, the parts were found in *statu quo.* During the whole treatment of the case he was very restless, and impatient of confinement, frequently moving and turning himself in bed; and when his companions refused to assist him, he would call in such persons as he could see passing his door, and beg of them to move him. He frequently unbuckled the straps which confined the limb to the apparatus.

By this time confinement and low diet had reduced him considerably. I put him upon a generous diet and allowed him a moderate quantity of brandy and porter.

After rubbing the ends of the bone together, till considerable pain was produced by it, I again applied the apparatus. At the end of seven weeks more I examined and found the parts apparently still more movable. The provisional callus had diminished, and appeared to partake much more of the nature of fibro-cartilage than of bone.

The poor fellow's patience and hopes seemed now completely exhausted; and, with tears in his eyes, he begged me to amputate the limb.

I now determined to try the effect of a starch bandage, if possible so arranged that he might walk about. With this intention I covered the limb from the toes up to the top of the thigh, with a simple roller applied with moderate tightness. Over this to the same extent I applied two folds of the bandage, well saturated with starch. Next I applied four splints of book-binders paste-board—well softened—reaching from the knee to the upper part of the thigh; and over these again, five or six folds of the starched bandage.

The limb was now kept in an easy and straight position for some four or five days; at the end of which time the bandage had become perfectly dry, very firm, and fitted so accurately to the limb that it was impossible for the fractuted parts to yield in any manner.

His companions now undertook the task again of teaching

him to walk—and with such success this time, that, in little more than a week, he was able to get about pretty well with the assistance of a cane only. In two or three weeks more he was in the stables attending to the stage horses. His gait was vigorous, and with the exception of the stiffness of the knee—necessarily occasioned by the bandage, for the time—no palpable defect could be observed in his walk.

In four or five weeks from the time of its application, that part of the bandage covering the foot and ankle had become displaced, and the parts consequently swollen and chafed. On this account I removed the whole of the bandage and applied another in the same way. While the bandage was off I did not attempt to see whether the limb would bend or not. The last bandage remained on about six weeks. On its removal the fracture was found firmly united. During all this time he was going about working in the stables, and at no time, while doing so, did the fractured part cause him more than a very moderate degree of pain. The fractured limb was nearly half an inch shorter than the other; but the shortening had occurred before the application of the starched bandage.

Reminiscences—and Excerpts from my note-book.

Dec. 9th, 1841—I was called on to visit an old gentleman residing some fifteen miles from town, at whose residence I arrived late at night. After having examined his case, and prescribed, I was requested by his overseer, who lived but a short distance off, to see and prescribe for his wife.

On inquiry I found that she had been in labor over 48 hours; that for the last three or four hours the pains had gradually become less strong, with longer intervals between them, until at length they had almost entirely subsided. The presentation was natural; the head lodged in the pelvis just within the labiæ. An old negro woman, who had been officiating as midwife, informed me that the head had not advanced any during the last five or six hours. I was informed by the husband that a neighboring physician had been sent for, and was expected in half an hour—but was earnestly requested by him, in the meantime, to *do something* for her.

As I was fatigued, and wished to retire—and another physician being expected so soon to take charge of the case—I would have declined making any prescription but for the urgent solicitation of the patient and her friends. To satisfy them until the physician's arrival, I, with some gravity, administered about half a teaspoonful of spts. lav. comp., in a small quantity of water. To my inquiries, next morning, respecting the progress of the case, her husband informed me that I had scarcely left her room before the pains became strong and frequent, and that in less than half an hour—and before the arrival of the other physician—the labor had terminated favorably. What a strong case this would have been in favor of ergot, had I administered it! Or, what a triumphant case for Homœopathy, if an amateur of the science had administered a "globule!"

In the afternoon of August 26th, 1843, I visited a negro woman, who had that morning been delivered of a dead child at the seventh month. For a month before parturition she had flooded a good deal, and since delivery the hæmorrhage had had been quite alarming. I found her free from pain, (which had ceased soon after the delivery of the child) and with the uterus quite relaxed. On examination per vaginam, I found a portion of the placenta presenting at the mouth of the womb, and by gentle traction discovered that it was still adherent to the anterior part of the uterus, near the neck. After making some ineffectual efforts to induce uterine contractions, I was compelled to leave her, to attend other pressing engagements; previously, however, having drawn a portion of the detached edge of the placenta through the os uteri, and left it acting the part of a tampon. Among other things I prescribed ergot, (to be commenced with immediately) and some powders, composed of sugar of lead and opium, to be given in case the flooding should again become profuse without *a return of pain.*

Her master misunderstood my directions, and supposed that the powders were to excite uterine pain and contractions in case the ergot failed to do so. Accordingly having admin-

istered the ergot without effect—in about four hours after she had taken the last of it—he commenced giving the powders. In an hour after the administration of the first one, she commenced having pretty severe pains attended with some flooding. He continued giving them, and on visiting her the next day, I found the uterus contracted, and the placenta lying in the vagina. Her master thought the tea (infusion of ergot) worthless, but was much pleased with the powders.

In October, 1840, I attended a little girl about four years old, for a severe attack of enteritis. One of the prominent features in the case was obstinate constipation of the bowels, attended with deep-seated and constant pain in the lower part of the abdomen. Every practicing physician knows how important the free evacuation of the bowels is considered by the friends of the sick, and with what anxiety they look forward to its accomplishment, especially when their attention becomes directed to the matter by the occasional administration of an enema. Up to the 6th day of treatment, nothing like a free discharge had been procured from the bowels, notwithstanding the administration of laxatives and enemata, and once, the introduction of a large gum elastic catheter into the sigmoid flexure of the colon.

The feverish anxiety of the friends had by this time gradually mounted to a high state af excitement. A consultation was accordingly proposed, and a physician of more years and experience than myself appointed to meet me at 4 o'clock in the afternoon.

My morning prescription was two grains of calomel and half a grain of extract of hyosciamus, to be repeated every third hour—and occasionally the tepid bath. My senior anticipated the time of meeting about half an hour, and forgetting (as *old doctors* sometimes will) that some *little* courtesy was due to a junior member of the profession, had ordered a discontinuance of my prescription, and had substituted in its stead *syrup. rhei. arom.* ℥ss., *magnes. calc.* grs. iii., to be given every second hour. The first dose had been given just before my arrival. We sat beside the patient, conversing for

about half an hour, when lo! she had a copious discharge from her bowels, and this was followed in the course of an hour or two by another—and another—to the perfect satisfaction of her anxious friends. The 'old doctor' had effected wonders, and he received, as he should, great credit for it.

To some, the means employed may not seem adequate to the end obtained, especially when they are informed, that the next day I gave a patient, in which there was no obstruction in the intestinal canal, nearly half a pint of *that same aromatic syrup of rhubarb*, without producing even a laxative effect.

On the 11th of May, 1843, I visited E. B. J., a plasterer, of rather a delicate constitution, about 29 years old. He was taken sick on the 9th, with a sharp pain in the left side, extending up into the left shoulder joint. He informed me that he had never had rheumatism, but that about 8 years ago he had fever with cough and acute pain in the left side. The pain in the present instance was entirely and permanently removed by a single bleeding, and a few small portions of tartar emetic, nor did he after this, throughout the whole period of his sickness have either cough, or hurried, or difficult respiration.

Notwithstanding the removal of the pain, the fever increased daily, the pulse becoming hard and corded, and as there were now no symptoms present calculated to direct the attention to any particular organ—(the stethescope giving no indications of disease of the lungs or pleura)—I concluded to examine the state of the heart. Synchronous with the first sound, and continuous with its whole duration, was heard a little below the left nipple, midway between it and the centre of the sternum, a moderately low and rather harsh bellows murmur. More to the left, say half an inch to the right of the nipple, and an inch and a quarter below it, and from this point to the nipple, was heard a low creaking sound synchronous with the second sound of the heart, and continued into the commencement of the first sound—that is, it was heard princi-

pally during the diastole—but also slightly during the commencement of the systole of the heart. The sound seemed superficial, was loud and distinct, and very closely resembled the creaking of the sole of a new boot. During the progress of the case the sound was frequently modified, at times even temporarily removed by treatment. For instance, for some hours after a copious bloodletting, by which the force of the pulse was considerably reduced, the sound entirely subsided. As the pulse gathered strength, the sound gradually returned, at first only to be heard during the period of rest after exhaustion, and to disappear when the chest was fully expanded. Then, when the heart again acted strongly, to be heard plainly, both when the chest was fully expanded, and when it was collapsed.

I found the diagnosis of the endo-pericarditis, the sound last described, not only deciding my opinion as to the affection of the *pericardium*, but also influencing me considerably in the treatment. This was decidedly antiphlogistic, and in no case have I ever seen the propriety of antiphlogistic measures justified by so thick a buffy coat, or so firm a crassamentum.

The case terminated fatally about the commencement of the 9th week; the pulse continuing hard and jerking almost to the last hour.

In one respect, the sound alluded to differed from the attrition murmur of pericarditis, as described by Hope. It will be remembered that in regard to the first sound of the heart, it was only at its commencement that it (the morbid sound) was heard. He says, "the murmur is almost always double, accompanying the two sounds of the heart, in correspondence with the movements of the organs backwards and forwards within the pericardium. I have, however, occasionally found it *stronger with the first sound, and once or twice I have heard it accompany that sound exclusively.* This might be anticipated, in consequence of the superior force of the systolic movement." In my case it was with the diastolic movement that the sound was principally heard; nevertheless

I could think of nothing capable of producing such a sound, except the effusion of tolerably firm coagulable lymph within the pericardium.

In a post-mortem examination, a few very soft and delicate masses of coagulable lymph were found on the surface of the heart, but entirely inadequate to the production of so harsh and loud a sound. In the right auricle and ventricle was a very firm fibrinous concretion, matted in the tricuspid valve and chorda tendineæ, and at points connected intimately with the smoother parts of the internal surface of the heart. So perfect was its organization that it required some little examination to distinguish the morbid formation from the natural structure of the heart. It contained no red globules, and had an outer coat, which could be peeled off in delicate shreds of an equable thickness, having much the appearance of an organized serous covering. A couple of small unadherent coagula were found in the left ventricle. The tricuspid, the aortic, and the bicuspid valves were slightly thickened and much redder than natural. This was more particularly the case with the latter, which was likewise studded thickly with semi-cartilaginous deposits, from the size of a poppy seed, to that of a flaxseed. About an inch within the aorta were several small white patches, rough, as if from absorption of the lining membrane. At the base of each of the aortic valves was a small ossific deposit.

As yet I had discovered nothing capable of satisfactorily explaining the creaking sound. Placing the heart back *in situ*, I proceeded to an examination of the lungs. The right was entirely healthy; the left contained a very few scattered tubercles, and was throughout firmly adherent to the parietes, to the diaphragm, and to the pericardium, the result no doubt of a former attack. In its thin edge, which was adherent to the pericardium, and which overlapped the left ventricle, a small portion of the pulmonary tissue had undergone a kind of semi-cartilaginous degeneration. This, by sudden pressure and relaxation between the finger and thumb, produced a sound exactly like that heard during the life of the patient.

The part of the sound produced by the pressure corresponding with that which accompanied the second sound of the heart, and that produced by the relaxation, corresponding as well with that part of it which was synchronous with the commencement of the first sound.

In this manner, so precisely could I imitate the morbid sound heard during the life of the patient, as to leave no doubt on my mind, that it was the motions of the heart against this substance which produced it.

Although my diagnosis happened in the main to be correct, yet the very symptom which went further than any other to determine that diagnosis, proved to have no connection whatever with the disease.

Case of Amaurosis occurring during an attack of Congestive Fever.

February 26th, 1844—Called to see Mrs. H., a lady about 24 years old, who has generally, until within the last few months, enjoyed good health. She is pregnant, for the first time, and she supposes in about her eighth month. During the whole period of her pregnancy she has suffered more from nausea and vomiting, than females in her condition generally do.

On the morning of the 24th, she had some slight chilly sensations, followed by high fever, and increased nausea and vomiting, the matter ejected being of a rich dark brown, nearly black color, and viscid, much resembling the appearance produced by the partial suspension and partial solution of pulverized extract of liquorice in a mucilage of slippery elm. The quantity thrown up was considerable, and recurred about every half hour.

On the morning of the 25th, the chilly sensations again returned, and this morning also, but without being preceded by any thing like a remission in the fever, or any abatement in the vomiting. Since the chilly sensations this morning, the vomiting has increased, the intervals between each spell being on-

ly about fifteen minutes. For a sensation of fullness about the head, she was bled yesterday to ℥xii, with relief to that symptom.

Her situation at the time of my first visit (1 o'clock, P.M., 26th) was as follows:—Pulse 145, small and weak; respiration natural; tongue moist, rough and white; countenance not expressive of much suffering or anxiety; skin cool, more especially that of the extremities, and of a livid ashy color. There is *less nausea* than usually accompanies so much vomiting. Each effort to vomit is preceded by hiccough and a burning sensation in the stomach, and followed by a burning sensation in the œsophagus and mouth. The matter thrown up is, she says, sometimes insipid, sometimes "bitterish sour" to the taste; no evacuation from bowels in 48 hours. She has taken nothing but a few small portions of morphine and tinct. opii, all of which have been soon thrown up. She has suffered some from pains in her limbs, but much more from pain in her back.

I applied sinapisms to her extremities, abdomen and spine, and ordered an enema, made active by a small handful of table-salt, and immediately after a spell of vomiting, administered a third of a grain of morphine, so that there might be time for it to produce some effect on the stomach before the probable occurrence of the next spell. In two hours she had had no return of vomiting, pain in the back much relieved, and she had had several small evacutions of hardened feces. ℞ quin. sulph. ℈iiss., ext. glycyrrh. grs. xviii. M. fiat massa in pilulas xii. divid.; two of them to be taken every third hour. Small quantities of brandy toddy occasionally, and a little lime water in the water she drinks.

Late in the evening Dr. Ames saw her in consultation with me. There had been no return of the vomiting, and the burning sensation in the stomach was quite relieved; pulse 128. The same treatment to be continued, (the quinine only every fourth hour), the enema to be repeated, and should the vomiting return, the morphine also.

27th.—Dr. Jones, the family physician, who has been absent, has returned, and joins us in the management of the case. She has vomited twice during the night, the matter, however, being less viscid, and the dark flocculi smaller in quantity. Several thin, yellow evacutions; feels quite faint; pulse 140; respiration 12; took two doses of morphine, a third of a grain each; continue the quinine pills and repeat the morphine; should she vomit again, continue the toddy.

Evening.—No vomiting, no evacuation. In the fore part of the day she had a great desire to be fanned, and to have her face and extremities bathed in cold water. Pulse fallen to 136; respiration 16; extremities warm; continue the same treatment.

28th.—She has not vomited, but had early last night considerable nausea, to relieve which she took a third of a grain of morphine; after this she slept about half an hour and awoke completely blind, not even having any perception of light, when the glare of a lighted candle was thrown on her eyes, and within a few inches of them—this state continues.

She has the inexpressive stare of amaurosis, and is in a great measure unable to control the motions of the eyes. The pupils dilate and contract irregularly, the dilatation being greatest when she is requested to make an effort to see any object. Pulse 124; respiration 16; temperature of the skin nearly natural. Continue quinine, grs. iv., every fourth hour.

29th.—Pulse 100, full and soft; no thirst; some appetite; pupils very much dilated and not at all affected by any degree of light. She is left to-day under the care of Dr. Jones, the treatment agreed on being an occasional mercurial laxative, and free cupping from the back of the neck.

Although we had considerable anxiety on account of the state of her eyes, we had strong hopes that her vision would be promptly restored after parturition, even if no improvement took place before that time.

On the evening of the 29th, labour pains came on, which Dr. Jones, who was present, thinking premature, attempted

to allay with morphine. After the first portion of morphine her pupils became very much contracted.

The morphine moderated, but did not entirely subdue the pains, and on the evening of March 1st, as they again became more severe, it was deemed unnecessary to interfere further. Accordingly about 10 o'clock at night she was delivered of a dead child, which appeared to have completed the ninth month.

No immediate improvement in vision took place after delivery.

March 3d.—Dr. Sims and myself visited her in consultation with Dr. Jones. The cupping has not been carried out effectually on account of her repugnance to the operation. Last night a blister was applied to the back of her neck. The pupils have again become dilated, and are slightly influenced by light. She has at times a slight perception of light when the luminous object is situated laterally, and this slight perception, is rendered more distinct after she has sat up in bed sometime. Dr. Sims and myself thought at one time that there was a slight degree of haziness in the interior of the eye, but concurred in the opinion of Dr. Jones afterwards that it was imaginary. Three images of the candle visible in the catoptric examination of the eye. Pulse 80; appetite tolerable; some thirst, and tongue slightly furred. ℞ calomel grs. x., compound extract of colocynth grs. v., immediately. After its operation, a moderately loose state of the bowels to be kept up by small doses of blue mass, till ptyalism is induced. Blisters on neck to be kept running; cups occasionally to the temples; moderately nourishing diet.

9th.—Mouth a little sore; vision very slightly improved; complained much yesterday of pains darting across from one eye to the other; continue same treatment.

17th.—Dr. Ames again visited her with us; mouth less sore; (the mercurial having been omitted). She can now tell when any one passes between her and a bright light. Pupils less dilated, but still preternaturally so; her color and strength have improved but slowly; she is able, however, to walk

across the room unsupported; tongue rough and coated; appetite pretty good; bowels costive; milk still secreted by the mammæ. ℞ ferri. carb. precip. grs. x. three times a day; blue mass grs. v. twice a day, and aloes in sufficient quantity to keep her bowels moderately open should the blue mass fail to do so; a more nutritious diet; tartar emetic ointment to the back of her neck, and the endermic application of strychnine to the temples.

28th.—There has been a slight improvement in her vision; catamenia re-established; continue the same treatment; substituting a weak solution of strychnine to the eyes for its application to the blistered surface on the temples.

May 12th.—All treatment has been suspended for four or five weeks. Since the suspension her strength and general health have improved considerably, but her vision none. Up to the time of the suspension of treatment, her vision had gradually improved, and that improvement still remains. She can see, but rather imperfectly, to read small print. Eyes easily fatigued, and when so, there is considerable twitching of the lids, and unsteadiness of the balls. Pupils still preternaturally dilated, and not regularly influenced by light. Ordered to resume the mercurials, blisters to neck and temples, and also the strychnine.

16th.—Her husband tells me that there has been a slight improvement. He thinks that after the drawing of a blister on one temple, the corresponding eye seems smaller, or less prominent.

As she is about to visit a relation at the North, where she will remain some months, she ceases to be under my care.

As to whether the quinine which she took, had any agency in producing the blindness, I will not pretend to decide. It will be seen that in about 30 hours preceding the blindness she took nearly a drachm. It affected the auditory nerves rather less than the same quantity usually does. Although I have for a number of years used the remedy extensively in practice, it is the first time that any affection of the organs of

vision has supervened in my hands during its administration. Two or three years ago a case of amaurosis, under nearly similar circumstances, occurred in the practice of an acquaintance of mine. The subject of it was a plasterer, about 35 years old. He had a severe attack of congestive fever, for which he was treated principally with quinine, in large doses. Before convalescence commenced, he suddedly became entirely blind, and remained so for some weeks after his recovery from the fever. After this his vision gradually improved, so that in a few months he was able to superintend business, but remains still very imperfect.

The quantity of quinine administered in the case, of which I have given the details, was less than I have prescribed in hundreds of other cases, without producing any analogous effects, but as the remedy has recently come into such general use in this part of the country, and I believe in many other parts of the south and south-west, as to have almost usurped the place which calomel occupied a few years since; mention of its possible agency in producing the effects alluded to, may not be deemed superfluous. For it is a fact, which many must have observed, that where any particular remedy is fast advancing in public estimation, its reputation is apt to exceed the proper limits, and consequently lead to its profuse, indiscriminate, and incautious administration; and the more valuable the remedy, to a greater extent is this the case. Something like this, no doubt, is, in a great measure, the cause of the rapid fall of calomel from that high place which but recently it held, both with the profession, and the public generally.

July 22, 1844.

REVIEWS.

ART. III.—*A Demonstration of the Curability of Pulmonary Consumption in all its Stages. Comprising an Inquiry into the Nature, Causes, Symptoms, Treatment, and Prevention of Tuberculous Diseases in general.* By WILLIAM A. M'DOWELL, M.D. Louisville, Ky. Prentice & Weissinger. 1843. pp. 269. 8vo.

We believe there is but one opinion among the professional readers of this work as to its merits. So far as it has gained the attention of medical men, the sentiment almost universally felt towards it, if we are not greatly mistaken, is one of no very high respect. The author has complained, indeed, that his work has been neglected by the profession, and one can readily suppose that the complaint is not without good grounds. For ourselves, we confess that we have felt a decided repugnance to reviewing it. We have felt most averse to disturbing the profound repose which we imagined it was enjoying, and was likely to continue to enjoy, on the shelves of the book-sellers. Cherishing no other feeling towards the author than one of good will, not only were we disposed to let his book rest, but we were even amiable enough to admit into our journal, nearly a year ago, a communication from him in relation to it, and to the merits of the method of cure therein set forth, which must have appeared to our readers much in the light of a puff direct. We have reason to believe that that communication has been productive of mischief. From its phraseology, readers have been led to suppose that the editors of this journal had in their

possession decisive testimony to the efficacy of Dr. M'Dowell's mode of treating consumption. The '*demonstration* of the curability of consumption *in all its stages*,' sustained as it was by what seemed to be our silent assent, has brought persons far gone in that disease to this city, only to die in a few weeks among strangers. We acquit Dr. M'Dowell of all purpose to deceive. In affixing such a title-page to his book, empirical as it strikes one, we can believe that he was stating the honest convictions of his understanding. Now and then, at long intervals, it is the good fortune of the practitioner to see a case of pulmonary consumtion cured, in what pathologists term the last stage of the disease. In asserting then, that the complaint was curable 'in all its stages,' Dr. M. set forth nothing more than the concurrent opinion of of the profession. We will allow that this was all that he meant to proclaim.

Such, however, has not been the impression of the public, concerning his pretensions and promises. He has been understood 'in the momentous demonstration which he claims to have made,' to teach that he cures consumption in its last and worst stages—that his 'course of treatment', in a word, 'is as specific for the control of tubercular diseases, as the use of quinine is in febrile diseases.' This has gone abroad in the pages of this journal, and not a note of warning or disapprobation, up to this time, has followed, to put our readers on their guard. We feel that an apology is due them—not so much for a failure to notice the work, as for admitting the advertisement to which reference has been made. So we propose now making amends for both delinquencies, as far as lies in our power, by exhibiting the book and its pretensions to a 'momentous demonstration,' in their true colors. Dr. M'D. has challenged investigation, and cannot complain if his claims to discovery are severely scrutinized. Moreover, he has had the benefit, for nearly a twelvemonth, of all the currency that our journal could give to his claims, and cannot therefore object, if we come forward thus late in the day and declare what is our estimate of the validity of those claims.

The pretensions of the work, as the reader has perceived by the title-page, are high. It professes to demonstrate, that consumption is curable in all its stages. That is a good deal. But it farther intimates, that the author was the first to make this momentous discovery. Nor is this all. It is by a novel and happy combination of remedies made by himself, that a control over tubercular diseases, perfect as that of quinine over intermittent fever, has been gained. In so many words; Dr. M'Dowell professes to have discovered a specific for consumption. Well may he wonder that the announcement of such a discovery has attracted so little attention. Only one explanation of it can be given—his demonstration has not been satisfactory. The profession has not given credit to the discovery. So many "cures for consumption" are before the public, that any new one works its way slowly to general notoriety. But, without further preface, let us proceed to notice Dr. M'Dowell's claims to originality.

The author shall speak for himself. His claims are set forth in the following extracts:

"My mode of treatment may be liable to exceptions, because it is somewhat novel and peculiar.

"The claim which I submit to the profession for a favorable consideration of treatment, is based on the fact that the result of my investigations and experience enables me to define a course of treatment which I feel confident will be found as specific for the control of tubercular diseases, as the use of quinine is in febrile diseases.

"These, (the experience and observation of others) together with the well-known character and modus operandi of the medicines I recommend, will, I trust, without attaching undue weight to my own experience, clearly demonstrate that consumption is a disease as curable as any other to be found in the therapeutical catalogue."

We notice first, the claim to originality in regarding consumption as curable in all its stages; and we regret to say that the claim is one which the profession will not be able to allow. This idea did not originate with our author, and is far from being peculiar to him. It is not a little singular that he

should ever have fancied that it was. As to the last and worst stage of the disease, he indeed admits, that the ablest pathologists teach that it is curable. If he had consulted a a very popular and accessible work, Stokes and Bell's Lectures (vol. 2, pp. 363, 365, 368) he would have found high authority for the curableness of consumption in its earlier stages. Other authorities might be mentioned, but we will not stop to quote them. These are sufficient for our purpose, since they make it clear that the doctrine taught in the work before us, amounting, as the author supposes, to a demonstration, is not new in the profession. But we pass from this claim, which, after all, is of but secondary importance, to the higher one of novelty and peculiar success of treatment. We have seen that Dr. M'Dowell ascribes to his method of cure even *specific* virtues. Let us see, if we can, in what the peculiarity of his system consists. What is it?

Really, we are at a loss for an answer. We will give the one which our author himself furnishes. He says:

"My *only peculiarity* consists in the application of therapeutical agents, more than usually in accordance with pathological indications that have been ascertained from actual autoptical observation of the fluids as well as the solids of the system."

The meaning of this is, that Dr. M'Dowell treats consumption more scientifically than anybody else. That is his peculiarity. He employs no new remedies, but applies the old ones more in accordance with pathological indications. *Iron* and *common salt* constitute his sheet-anchor. If they do not cure, we understand him to admit that the cure cannot be accomplished at all. But to do good, it would appear that their action upon the system must be understood. He remarks, on this subject—

"The especial *modus operandi* of the principal articles I use in the cure of consumption, more especially the powerful anti-tubercular efficacy of common salt, has heretofore, as I am aware, been but little, if at all, adverted to."

The author seems to be aware of the fact, that "brandy and salt" have been making a prodigious noise in the country, for years past, as the "sovereignest balm" yet discovered for all the ills that assail poor humanity; but, then, their *modus operandi* was not adverted to or understood. Hence their failure.

To us, there is something almost ridiculous in this. After such a flourish of trumpets in the introduction, about novelty and peculiarity of practice, the only novelty brought to light in the sequel, consists in a more scientific use of iron and salt—a more correct appreciation of their *modus operandi.* And we are asked to believe that these articles, thus guarded, are as specific against consumption, as quinine is against fever and ague! Nor would a knowledge of their *modus operandi* seem to be indispensable to their success; for after all that the author had previously urged upon that point, he winds up his remarks on iron with these words:

"But whether this be the *modus operandi* or not, we have at least abundant matter-of-fact evidence that iron is productive of each of these important changes in the system, compared with which all speculation upon *modus operandi* is *idle* and *profitless.*"

If the reader should now come back upon us with the question, *where, then, is the peculiarity?* we should be obliged to answer, *we do not know.* It is not the iron and common salt, for they are old and common. And it would be trifling to say that it is to be found in the author's speculation upon their *modus operandi*, for that he has pronounced "idle and profitless."

We respectfully submit whether there is anything in this method of cure to flatter the hopes of the consumptive? We submit, especially, whether there is anything in it to tempt patients, with the disease far advanced, to forsake their family physicians, and all the comforts of home, and come to pass their last weeks among strangers in a tavern?

It does not comport with the end we had in view in writing

this brief article, to consume time and space by dwelling on the pathology of our author, or the style in which his book is written. The latter, it must be admitted, is very much his own. We presume, no one will dispute with him the title to it. But he will find it difficult to persuade any one, that he has the shadow of a claim to originality in his views concerning the pathology of consumption. No one, especially, who reads his book with tolerable attention will give him credit for it. It will be impossible; for it must be perceived that the opinions laid down on one page as original and peculiar to the author, are referred to on subsequent ones as having been long held by others.

In this manner our author unceremoniously sets aside, in one paragraph of his book, claims which he had set up in another, and in the end makes it perfectly manifest, that he has no claims to originality either of pathology or therapeutics. No doubt, he treats consumption with as much success as other physicians; but he has certainly written, concerning it, one of the most bungling, blundering volumes that ever was called forth by the subject. He has, possibly, seen cases of consumption cured; but we are yet to learn what new agent or process he has added to our professional resources. His "demonstration" amounts to nothing. It does not even embrace the whole of the little evidence extant, that tubercular phthisis has been cured in some happy instances.

With this brief exposition, we dismiss the work. We do not suppose that any professional opinion will have much weight with the victims of consumption. They will still listen to the promises of cure, from whatever quarter they may come. Theirs is a hope which nothing but the grave can extinguish. But we have written this for professional readers; and if, hereafter, they recommend their patients with tuberculous lungs to visit this city, in search of the healing virtues of iron and table salt, they will do so with their eyes open.

Y.

ART. IV.—*The Hospitals and Surgeons of Paris.* An Historical and Statistical account of the Civil Hospitals of Paris; with Miscellaneous Information, and Biographical Notices of some of the most eminent of the living Parisian Surgeons. By F. CAMPBELL STEWART, M.D. N. York: J. & H. G. Langley. Phila.: Carey & Hart. pp. 432, 8vo: 1843.

Dr. Stewart spent about four years in what a distinguished writer calls "the seat of all dissoluteness," Paris, and, if we are correctly informed, under circumstances peculiarly favorable to professional improvement and observation. He seems to have been industriously occupied, and this publication, which has been before the public some time, is the first fruits of his industry.

Dr. Stewart speaks of the civil hospitals only, and presents, without doubt, the best and most concise account of them within the reach of the American reader. One cannot rise from a perusal of the book without a sentiment of admiration for a Government, which, whatever may be its faults, provides such noble charities for its subjects. It is not merely a wise economy (for such there undoubtedly is) that has dictated them, but something far higher and nobler. The foundation of the present system dates from the Republic and the Empire; until that period, the French hospitals were in a most wretched condition. Much of their present efficiency is due to one whose ambition was not more grasping than his intellect was comprehensive. Napoleon educed order and system from the civil chaos of the Revolution, and infused them into every part of his Government. Something of course has been done since his time, but to him, we believe, the French people are indebted for many of the most admirable features in their system of hospitals.

The administration of the civil hospitals is conducted by 1st. a *General Council*, consisting of seventeen members; 2d. an *Administrative Committee*, composed of five members of the general council; 3d. a *Banker* and a *General Secretary*. The general council forms a part of the Home Department of the government, and communicates with the Minister of the Interior.

The hospitals are divided into three classes: *General Hospitals*, *Special Hospitals*, and *Hôspices*, or *Alms-houses.* Of all these together there are thirty-six. Each is provided with a *Director; Surgeons* and *Physicians* in proportion to the number of beds, allowing about 60 beds to each; an *Apothecary; Internes*, or Resident Physicians, and *Externes*, or "Dressers;" *Students of Pharmacy; Sisters of Charity;* a *Priest;* a *Steward;* and male and female *domestics.*

Belonging to the general administration is the *Bureau Central*, or office where patients apply for admission into the hospitals. A certain number of medical men are attached to it, chosen by "concours," and it is from this body that the hospital physicians and surgeons are selected. Then there are the "*Pharmacie Central*," or general laboratory, for the preparation of all the medicines used in the hospitals and prisons; the *Bakery*, an immense establishment; and the *Wine Vaults.*

The reader will see what a vast system it is, and yet the most perfect order and economy reign throughout. Our author gives an historical sketch of each of the institutions, with minute information of everything relating to them that would interest the student or professional man. We cannot, without doing him injustice, attempt to follow him through these various details; for all which, and much more than we have named, we refer the reader to the book itself.

The average population of the hospitals is about 20,000. During 1840, the whole number of patients treated in the hospitals was 83,643. Of these 61,883 were medical patients, and 21,760 surgical patients. What a field for study!

The annual expenses of all these establishments exceed *twelve millions* of francs. The revenues exceed this amount, so that there remains, at the end of almost every year, a balance unexpended. The revenues are derived in great part from taxes on theatres and places of public amusment; allowances are also made by the city, and by the department in which the city is situated. Another source is indicated in the following extract:

"A large amount is likewise derived from the "*Mont de*

Piété," as it is called, or by pawn-broking. All the pawn-broking in Paris is conducted by agents of the hospital administration, and the profits derived from this source go to the general hospital fund; articles pledged may be redeemed at any time within twelve months, on the payment of three-quarters per cent. a month on the amount advanced; if not called for by the expiration of the year, they are disposed of at public auction, and the surplus over the amount advanced, is retained, during three years, to the credit of the depositor; if not withdrawn prior to the expiration of this term, the surplus is passed into the treasury of the hospitals; occasionally very large sums are derived from this source."

One of the most interesting institutions that the author speaks of, is the Veterinary School and hospital at Alfort. This, like all similar establishments, is under the control of the Minister of Public Instruction and Agriculture. The term of study is four years, and the course of instruction is complete on all the branches likely to prove useful in the life of a veterinary surgeon. After describing the *operating-room*, Dr. Stewart says:

"Two days of each week, Monday and Thursday, are set aside as operating-days, and old, broken-down horses are provided *by the Government* (the department of Instruction and Agriculture) for the barbarous purpose of being *dissected alive*. Many of the operations performed are wholly useless, and the cruelty exercised by the young students engaged in them unpardonable and disgraceful. Ten or a dozen horses, which are purchased at about twenty francs a head, are provided on each of the indicated days; they are thrown down and tied with all their limbs together, and a tourniquet applied to the under lip (to keep their heads down and hold them still) at five o'clock in the morning, from which time until five in the afternoon they are subjected to all the mutilations that the young men choose to practise upon them. Each horse has to undergo *sixty-four* operations, after which, should he be still breathing, an end is put to his miseries, and he is cut up for the use of the menagerie at the Garden of Plants. * * *

"When thrown, one of the young men holds the head of the trembling and groaning animal tightly fixed to the ground with the tourniquet, while a dozen others cut and hack at him in the most disgustingly cruel manner; some engaged in extirpating his ears, and others his eyes; one taking up arteries, and another amputating his tail and limbs, and indeed subject-

ing him to every operation that can be, as well as those that cannot be, advantageously practised on a wounded horse."

A chapter is devoted to *Medical Instruction in France, the condition of the profession* there, and *the advantages of studying at Paris.* He thinks the chief inducements to resort to that city for acquiring a medical education are the opportunities presented for studying *Anatomy*, healthy and morbid, human and comparative, *Obstetrics* and *Diseases of Children*, *Diagnosis*, *Diseases of the Skin* and *of the Eye*, *Practical Chemistry*, *Operative Surgery*, *Orthopedy*, *and Botany.* He says nothing in favor of French *practice;* on the contrary, he believes "our own systems of treatment are, in most respects, far superior to those pursued by the majority of the French faculty."

Dr. S. gives a highly interesting account of the Schools of Medicine and Pharmacy, and the courses of instruction in each; also of the Private Courses, Dissecting-Rooms, Libraries, Museums, Cabinets, Academies, Medical Societies, and Botanical Gardens. Under the head of *Miscellaneous Information*, the student will find every thing necessary for him to know as to the expenses and mode of living at Paris, even to the matter of *conveyances* and their prices.

Part II is devoted to biographical sketches of some the most distinguished living surgeons of Paris, and is one of the most attractive portions of the book. We shall confine our notice of it to some extracts from the biography of Velpeau. His name occurs so frequently in books and periodicals that the reader certainly feels desirous to know something of his history; and the author's account of him differs somewhat from that given in a certain book of travels by a distinguished surgeon of this country. We do not mean the one who sacrificed a cock* at the grove of Æsculapius, but the

* This most ridiculous affair has been narrated to us by an eye-witness. The High-Priest, or "Great American Surgeon" (this he caused himself to be heralded on approaching a village), it will be remembered, not only disturbed the sphered shade of the old bald-headed Greek, but thought to tickle his own palate by something of a *gustatio* from that same cock. It proved to be anything but "fat capon;" our informant says it was the "leanest, toughest, blackest, old cock that ever saluted the grey-dawn."

one who tells of all the great men and *all the fine horses* that he saw in his '*rambles.*'

"Alfred-Armand-Louis-Marie Velpeau is the son of a blacksmith. He was born on the 18th of May, 1795, at the village of Brêche, situated on the side of the main road to Tours, and distant eight leagues from that populous town. His parents were poor, but honest, kind-hearted people, divested of all feelings of ambition, as is evinced from the fact of their having destined their son to follow the laborious and unprofitable trade, from the exercise of which they derived their own support. Thus as soon as he was able to run about and use his limbs, young Alfred's services were required for attending on the forge and keeping his father's bellows in play. He is said to have been of a quiet, reserved disposition, rarely, if ever, indulging in the sports and amusements of his companions, but occupying all his hours of play, and every moment that was allowed him from his irksome task, in endeavoring to learn to read.

"It so happened that, though no scholar himself, and not at all given to study, the elder Velpeau possessed the most extensive library that his village contained, and it was composed of *three works*, old, worm-eaten, thumbed, and dirty. They were a treatise of *Hippocratie*, the *Rustic Mason*, and the *Poor People's Physician*. With the assistance of these books alone, and an occasional lesson from some well-disposed friend, young Alfred was soon enabled to read. This success increased his ambition, and he determined to persevere and gain knowledge from every source that presented itself to him. Not being able to get at any new books, he occupied himself in committing to memory the three just cited, so that by the time he was ten years old he had gotten every line of them by heart, and he now began to practise himself in writing, and soon became capable of keeping the small scores of the farriery. It appears that his first predilection for medicine was derived from his study of the receipts and directions contained in one of the works above named; and this predilection shortly evinced itself in a decided manner, for no sooner had he acquired a knowledge of the virtues of some of the remedies in common use, than he commenced their application. It seems that he often amused himself by prescribing for the trifling maladies, cut fingers, bruises, &c., of his companions; and so successful was he in their treatment, that the urchins always sought him out on the occurrence of the slightest accident. An anecdote is related of his having cured himself of a troublesome ulcer of the leg, for which he had been attended for a long time by a country doctor, and thus

accidentally brought himself into notice, for from that period he was regarded and looked up to as the village oracle, on all medical and surgical subjects."

At this time Velpeau received some instruction from a curate, who came to reside at the village and who gave gratuitous instruction to the children of his flock. A warm attachment sprung up between teacher and pupil, but unfortunately the curate died after four month's residence.

"When sixteen years of age, an unlucky accident occurred, which promised at first to destroy at the same time his young professional reputation, and his hopes of future success and advancement. He had undertaken to prescribe for a young girl, who was ill, and administered a dose of black hellebore, which produced the most alarming symptoms, and jeopardized the life of his young patient. As soon as the extent of the danger was known, a messenger was despatched for a skilful physician, whose residence was at some distance, and during the time intervening until his arrival, the innocent cause of all the difficulty remained in a corner of the sick-room, appearing the picture of despair, and watching anxiously the progress of events, uncertain as to what consequences might ensue to himself. At last the physician arrived, and by his judicious management was able to restore the little sufferer, and allay the immediate apprehensions of its anxious parents. Before his departure, this physician sought out Velpeau, whose history, as he had heard it from the messenger by the way, interested him, and after conversing with him for some time, and noting his enthusiasm for medicine, advised him to prosecute his studies on all occasions, and promised to recommend him to the notice of a wealthy proprietor of the neighborhood, He kept his word, and gave so favorable an account of the young man to his friend, as to induce that gentleman to grant him the privilege of prosecuting his studies under his roof, and with his own children, directing their preceptor to afford him every facility for acquiring knowledge."

Velpeau's progress was so rapid that in a few months he acquired a familiar knowledge of the classics, and was pronounced an excellent Latin scholar. He now set off for Tours, with a small bundle of clothes, a week's provision, and thirty-seven francs in his pocket.

"On his arrival at Tours, his first care was to seek out a

cheap lodging, which, after a long search and much trouble, he succeeded in obtaining, nearly if not wholly rent-free, in the garret of an old and dilapidated building.

"During the early part of his sojourn at Tours, he lived on a scanty supply of coarse bread and cheese, which was sent to him once a week by his thoughtful mother; indeed he has often said, that without this fare, poor as it was, he should have had nothing to eat, or been obliged to resort to the unpleasant expedient of seeking charity. The whole of his time, during the day, was passed at the hospital, in attending to the patients and in dissecting, and the greater part of the night was occupied in close study in his small room.

"He appears to have been fortunate in making friends, and amongst them he was able to rank the excellent surgeon of the Hospital of Tours, Monsieur Bretonneau; this gentleman was so much pleased with his great application, and unremitting attention to the patients, that he procured for him the remission of the usual quarterly payment of twenty francs exacted from students attending the hospital. This was of great assistance to Velpeau, as the money thus saved enabled him to provide some few necessaries, and one or two good books.

"The attention of the hospital authorities having been thus directed to him by their chief surgeon, they continued to note his conduct, with which they were so well satisfied as soon to accord him the place of Interne, as a reward for his kindness to the sick, and for the very essential services which he was then capable of rendering to the institution over which they presided. Previous to this, however, and after only fifteen months' study, feeling himself prepared for it, he underwent his examination for the diploma of "Officier de Santé," which he obtained without difficulty, gaining his license with high encomiums from his examiners, and the warm congratulations of his friends."

He was not satisfied with thus gratifying the highest wishes of his parents; his ambition was aroused and he resolved to attain something still higher.

"He became first assistant to Monsieur Bretonneau, and attended with him to his private practice at such times as his other duties would permit. He gradually became known, and began to get a little practice for himself, the receipts from which, together with the two hundred francs allowed him annually by the hospital, enabled him to procure more comforts and live better than he had hitherto done; it did not induce

him, however, to relax his exertions, for he continued still to devote every leisure moment to study."

At twenty-five, he fell in love—became engaged to a lady who, though far above him in society, and possessed of some wealth, professed for him the warmest attachment. But—she jilted him. We shall let Dr. S. tell the story, especially as his fling at the sex creates a suspicion that twenty-five was a critical period in his own life.

"One of those unaccountable freaks of woman's fancy, which are of but too frequent occurrence to be creditable to the sex, came, however, in the way of his expected happiness, and caused the lady to dismiss her lover, without assigning any reason for so doing. Mortified and provoked at such treatment, he at once determined to leave the place of her abode and his fickle mistress behind him. * * * After hesitating for some time time, and yet remaining in a state of uncertainty, it is believed that he only determined to seek Paris by the advice and at the earnest solicitation of his friend M. Bretonneau, who kindly provided him with a letter of introduction and recommendation to the excellent Dr. Jules Cloquet, with whom he was intimately acquainted, and who pressed on him the acceptance of a loan of ten Napoleons, (about $40.)"

With a few clothes, and four hundred francs in money, he set out for Paris. On arriving there, he rented a small room at *seven francs* a month, and immediately made his way to the hospitals, between which and the public libraries he spent his whole time. He lived on coarse ammunition bread and water, and economised so closely that after the lapse of three months he had spent only 100 francs. By the advice of Cloquet, who had manifested considerable interest in him, he now entered the "concours" and gained a situation in the hospital St. Louis. Here he remained three years, gained the anatomical and physiological prizes for the first year, and delivered lectures on anatomy and surgery to the junior students. Next he was for some time private assistant to Dr. Bougon, surgeon to the Duke de Berry; then contested for the place of "*Aide d'Anatomie*" to the faculty, and was successful. He now delivered regular courses of lectures on Surgery and Midwifery,

which were successful and profitable. In May, 1823, he was examined for a degree; his Thesis on the occasion was highly spoken of, and was published. Shortly after he was appointed "Chef de Clinique" in the *Hôpital de l'Ecole*, under Dr. Bougon. In 1824, he entered the School of Medicine as Professor Agrégé. In 1828, he was unanimously chosen Surgeon to the Bureau Central, and was immediately appointed to the hospital *St. Antoine* in the quality of Surgeon-in-Chief *ad interim*.

"Though always industrious, this seems to have been the period when he devoted himself most intensely to study, and then it was that he was occupied in preparing the numbers of articles which he shortly afterwards began to publish. * *

"After remaining for a short time at St. Antoine, he was transferred to the *Hôpital de la Pitié*, where he had to himself a separate and wholly independent service. Whilst at *la Pitié*, his lectures were continued. One more promotion brought him from this latter hospital to that of *la Charité*, where he has remained ever since, followed in his morning visits by a larger number of pupils than any other surgeon in Paris."

With his career as surgeon to *la Charitè* the reader is familiar.

The history of Velpeau is the history of all. With few exceptions, these distinguished men have risen from the lower ranks of society, have absolutely fought their way from poverty and obscurity to wealth and high-station. It certainly speaks much for a system that thus leaves an avenue to intellect and industry. There is something, moreover, in the contemplation of these successes that kindles the brain and nerves the arm, that makes the eye brighten and the heart glow. But is there not another side to this picture? It does not tell of the many fine and gentle natures that gave way; of the many delicate spirits that fell crushed and broken in the strife; of the high hearts that went down in despair, after toiling morn and night until the book or pen

> "Vibrated, as the ever-beating heart
> Shook the weak hand that grasped it."

No, no, it does not tell any of this—and perhaps it is well.

C.

SELECTIONS

FROM

AMERICAN AND FOREIGN JOURNALS.

Enormous Tumor developed in the substance of the Womb.—We find an account of this extraordinary case in our Spanish contemporary, published at Havana. The subject of it, Isabel Vasquez, was about 40 years of age, unmarried, of nervous temperament, good constitution, correct habits, and a character at times vehement and irascible. In 1831 she contracted a *sub-inflammation* of the womb, which was only partially subdued by the treatment instituted; a relapse occurred before and after each menstrual period. In 1832 and '33, from the elevation, tension, and hardness of the abdomen, an ovaritis was suspected, and iodine was freely used externally and internally. At this time the fears of the reigning epidemic led to the neglect of all plans of cure, and the disease made rapid progress. The abdomen became more tense, the menstrual flux more scanty, the patient was distressed by a feeling of constriction; there were dull pains in the lumbar region, which augmented and finally simulated lumbago; walking was difficult; and after this epoch, erysipelatous affections occurred in the vulva, greater labia, the perineal and hypogastric regions, three or four days before and during the menstrual period; these terminated before or after the appearance of the menses, leaving the skin in a healthy state, except the distension it suffered in consequence of the greater elevation of the tumor. Externally the latter was regular, although a little inclined to the right side of the right iliac fossa, owing perhaps to the habit of inclining the body to that side. At this time also, perhaps

in consequence of the weight of the tumor, there was a curvature of the vertebral column, which had almost reached its maximum at the time of the patient's death.

Until 1836 and '37, the disease was somewhat stationary, which was attributed to the use of certain mineral waters, and baths, especially those of Marianao, Cotilla, Obispo, &c. After 1840, the growth of the tumor continued, and the symptoms depending on it increased. Nutrition, which had hitherto been healthy, began to suffer derangement; notwithstanding the patient's appetite was good, the flesh became flabby, and the body emaciated; respiration was slow and difficult, and the want of duly oxygenized blood, contributed further to these alterations. The urinary and other secretions did not suffer any derangement, and were easily excited by the proper remedies. The emaciation, however, was by no means in relation to the enormous size of the tumor.

Menstruation continued through the whole course of her illness, until the month preceding death. Yet the vagina, as shown by the autopsy, was exceedingly contracted, scarcely admitting the extremity of a common sound. This obstruction of the vagina was apparently the cause of the scanty monthly flow, and also of the greater development and increase of the tumor.

The immediate cause of death was a violent and rapid peritonitis, lasting 48 hours only, and consequent upon a rupture of the peritoneum. The rupture occurred during an involuntary and somewhat exaggerated movement on the part of the patient. She felt, at the time, as if *something* had given way; this was soon followed by the most acute pain, by anxiety, fever, coldness, and all the precursory symptoms of death.

We give the narrator's account of the autopsy:

External Appearance.—The skin was attenuated, stretched, and lustreless; the features marked; the venous system completely engorged with blood. The vertebral column presented a deviation to the right; the chest, in its inferior third, and the entire epigastric region were distended; the abdomen was so much enlarged that, at its most elevated part, the middle

third of the linea alba, it measured *two yards and twenty-seven inches* in circumference, and, from the xiphoid cartilage to the symphisis pubis, *one yard and a third* in length. * * * Beneath the umbilicus were two purple spots, one of which occupied almost the entire sub-pubic region, the other, smaller in extent, occupied the right iliac region; the body presented nothing else worthy of remark, except the emission of caloric from the abdomen, which offered a striking contrast to the icy coldness of death.

Internal Appearance.—The abdomen being opened in the whole extent of the *linea alba*, the skin was observed to be attenuated towards the superior part, whilst in the middle and below there was a thickening of more than two inches. The epigastric vein was dilated to twice its natural size and gorged with blood; its ramifications, and the whole venous system, were strongly injected, although the arterial vessels presented the normal calibre. The external and internal oblique muscles, in consequence of the increased length of the abdomen, were greatly attenuated and had almost lost their natural color towards the inferior part, at which point they were separated from the cellular covering uniting them anteriorly to the abdomen, and adhered behind to the peritoneum; the upper parts of these muscles were attenuated, but retained the natural color.

The peritoneum adhered strongly on one side to these muscles, and on the other to the body of the tumor. At this point a *want of continuity* was observed in the membrane; it did not invest the viscera which were found in the epigastric and hypochondriac regions, but, in consequence of the *laceration*, had retracted, leaving them exposed and abandoning its natural relations; it was considerably injected with blood, and had acquired unnatural density and consistence.

All the viscera pertaining to the digestive apparatus had lost their proper position: the stomach, the liver, the intestines, and the pancreas, were displaced by the tumor. The first was flattened at its rhomboidal extremity or cul-de-sac; it was healthy, but inclined towards the right and to the lower part of the right hypochondrium: the liver occupied both hypochondriac regions, and was double the natural size; the slightest pressure sufficed to rupture it: the gall bladder was much dilated, and contained a large quantity of bile: the pancreas and spleen, like the liver, was gorged with blood and brittle: the intestines, pushed towards the lower part of the hypochondriac regions, and inclined to the left, scarcely appeared like the convolutions in those regions; they exhibited spots of

phlogosis, and the rectum, at its middle and lower part, had almost lost its cylindrical form, owing to the pressure of the tumor.

The lower half of the abdomen and nearly all the superior was occupied by the tumor, which sprang from the body of the uterus, and affected the same conoidal form. Strongly adherent at the inferior and anterior part to the peritoneum and the muscles of the lower belly, and inclined towards the right, it was free in the superic · anterior, posterior inferior, and posterior superior portion. One of the ovaries was completely atrophied, the other was hypertrophied. The Fallopian tubes exhibited no particular lesion, neither did the cavity of the uterus, which not only preserved its original form and dimensions, but the internal membrane was of the natural color, healthy, and lubricated by the fluid natural to it.

The vagina and mouth of the womb were altered in texture and form. The parieties of the former were thickened, and its cavity, as already stated, so narrow as scarcely to admit a common sound; whilst the *os tincæ* was confounded with the body of the womb, and affected externally by the degeneration which formed the base of the tumor. The round ligaments were thickened and distended, indicating the constant struggle they had maintained with the tumor; the left was the more elongated in consequence of the inclination of the tumor towards the opposite side.

The dimensions, thickness, and weight of the immense mass, at the time of extraction, were as follows:

Length, - - - - - - -	1¼ yards.
Circumference, - - - - - -	2⅔ "
Thickness and diameter, - - - -	¾ "
Weight, - - - - - - -	63 lbs. (avdp.)

It was of a lardaceous nature, and was confounded with the white and fibrous covering of the uterus. The circular and longitudinal fibres of the latter were considerably enlarged, the uterine veins and arteries were enlarged and thickened, and more dense than natural; they were engorged with blood, but no vestige of mortification was observed either in them, or in the tumor, or in the membrane covering it.

Some irregularities were noticed on the posterior surface, near the apex of the tumor. It should be noted that the part of the tumor corresponding to the right iliac region was more developed, owing doubtless to the curvature of the vertebral column, and the habitual position of the patient. There was

another small eminence on the posterior and left side which looked like a *cyst*, but on dividing it no fluid escaped.

The urinary apparatus had suffered no disturbance. The bladder, kidneys, and ureters were healthy. The cavity of the small and large pelves presented no particular alteration, save that the pubic and sacro-iliac symphises were developed as in pregnancy.—*Repert. Medico-Habanero.*

Belladonna in Scarlatina.—It was not until some fifty cases of scarlatina had occurred in the Orphan House, of Charleston, S. C., and my father and I myself found ourselves burdened daily with new cases, and had reason to apprehend that every subject for the disease would be attacked by it, that I suggested a resort to the atropa belladonna. In accordance with my views, we proceeded to its administration to every child who had not yet contracted the disease, in the following manner: Five grains of the extract were dissolved in one ounce of cinnamon tea, and of this five drops were given morning and night to every child at or under 3 years of age, and one drop more for every year above that age.

In some few of the children under its influence, we observed a slight redness of the fauces and lips, with a faint efflorescence on the skin of the throat and cheeks, which might perhaps be attributed to a modified attack of the epidemic, or more probably to the effect of the remedy.

This practice was continued until the disappearance of the epidemic, in the course of eight weeks from the time of its first visitation, and three weeks from the commencement of the belladonna treatment. Not more than about 6 or 7 new cases occurred after the exhibition of this prophylactic, and the greater part of these occurred during the first week of its employment.

Such are the facts of the case, and it is to these facts I wish particularly to call attention. They are publicly sustained by a board of 12 commissioners or administrators, selected from among the most respectable citizens of Charleston, by the city council, as guardians of the "public's children," and of course cannot be controverted; indeed one of the members of the board, Mr. Daniel Ravenel, a gentleman of literary acquirements and high attainments, was himself instrumental in instituting the prophylactic remedy under discussion. Here, then, we have a large family, of 110 children, all ripe subjects

for scarlatina. In the course of 5 weeks one half fall under its influence—a prophylactic is suggested—it is tried; and suddenly, in the midst of its malignancy and prevalence, the epidemic is arrested and soon disappears altogether.

Dr. Logan, in N. O. Med. Jour.

Case of spontaneous Removal of a Cataract.—Mr. R., a carpenter and joiner, ætat. 57, had cataract of the right eye fifteen years, and for five years has not been able to see at all with this eye. A short time ago, he consulted a well-known oculist in New York, who advised an operation, which circumstances obliged him to defer. About six weeks ago, while on a visit to a friend, he took up a pair of double convex spectacles, and applying them to his blind eye, discovered to his astonishment that he could see and even read small print. He consulted a surgeon on this singular occurrence, who informed him, that by some means which he could not account for, the cataract had become detached, leaving the pupil clear.

The eye now presents the following appearances. When at rest, the pupil is perfectly clear, and the contractions of the iris natural. The posterior chamber is very large, and the iris slightly tremulous. When the ball of the eye is moved, there suddenly shoots up behind the iris an opaque lens, of grayish color, medium size, and perfectly circular. It sometimes rises so high as to close the pupil entirely, particularly if the head is inclined forwards; generally it covers only the lower half of the pupil, and its motions are so rapid as not to interfere with vision any more than the act of winking. There is no pain in the eye, nor has there been any sign of inflammation. The patient is of very temperate habits, and is positive that he has never received a blow on the eye or head. He now uses this eye principally, on account of a cataract forming in the left eye.

From the size of the posterior chamber and the tremulous motion of the iris, I was at first inclined to account for the displacement of the lens by dissolution of the vitreous humor. But the globe of the eye is firm, shining, and elastic, the sclerotic of its natural color, and the sight good. Mereover, the vacillating motion of the iris is no greater than we often see after the removal of a cataract. In the four weeks that have elapsed since I first saw this case, I cannot detect any change in the appearance of the lens; it is probable that it is still en-

closed in its capsule, which protects it from the dissolving properties of the aqueous humor.

This case is interesting, because it proves that cataract may sometimes be cured spontaneously. By a sudden jerk of the head, a fall, a blow on the eye or the temple, the opaque lens may be torn away from its natural connections, and removed entirely out of the axis of vision, leaving the eye in the same condition as after the operation by depression. Whether a change has taken place in the ciliary body, by which the connections of the lens are softened and loosened, is a question which we are not competent to answer. It is probable that some such change has occurred, or the spontaneous removal of the cataract would be of more frequent occurrence. Whatever this change may be, the present case shows that it is not always of sufficient gravity to interfere with perfect vision.

As long as the opaque lens remains behind the iris, it gives no uneasiness; but if it should pass into the anterior chamber, it is liable to create so much pain and inflammation, as to require its removal. This may be done by incision of the cornea, as in the operation of extraction, or we may adopt the expedient of Demours, and attempt to return it to the posterior chamber, by laying the patient on his back, and dilating the pupil largely with belladonna.—*Dr. Eustis, in N. O. Med. Jour.*

On the use of the Alcoholic Lotion in Phthisis Pulmonalis. By Marshall Hall, M.D., F.R.S., &c.—So many persons affected by incipient phthisis, marked by dulness of sound on percussion, and no doubtful pectoriloquy under the clavicle, hæmoptysis, and disposition to chills, heats, and early morning perspirations, &c., have been benefitted and restored to apparent health by the remedy or remedies, which I am about to mention, that I cannot but think they possess great efficacy.

The first and the principal of the remedies is an alcoholic lotion constantly applied by means of six folds of linen over and across the upper lobes of the lungs.

One part of pure alcohol is mixed with three parts of water. It is applied tepid at first, afterwards of the temperature of the atmosphere. It is applied in *small* quantity at a time, every *five* minutes, so that the application may always consist of alcohol and water. (If applied in larger quantity and less frequently, the alcohol would evaporate, and water alone

would be left, and this would be the source of a feeling of discomfort instead of the feeling of glow which the alcohol induces.) The application is easily made; a piece of soft linen, of the size of a very *large* sheet of letter-paper, being folded in the usual manner, is then folded twice more, in lines parallel with the first, so that the whole consists of six folds. These are stretched, applied across the upper part of the thorax just below the clavicles, and fastened to the shoulder-straps, or other part of the dress, which latter is to be arranged so as to be readily opened and closed. A sponge, the size of a walnut, is then filled with the lotion, and pressed upon the linen along its whole course, the dress being opened for this purpose and immediately closed.

This operation need not occupy five seconds. It should be repeated, as I have stated, every five minutes. The application of the lotion should be incessant during the day and all waking hours, the dress being light, or even entirely removed, so as to allow of free and rapid evaporation. It is suspended during the night.

It is by no means my wish to laud this remedy beyond its just value; but I have no hesitation in asserting that it possesses a power in checking the progress of the deposition and softening of tubercle in the lungs, beyond any other which I have tried. And the number of patients who have recovered from incipient phthisis under its use, and who, after many years, are still living, and in apparent health, induces me to express myself in strong terms in regard to its extreme value.

One patient, who consulted me fifteen years ago, had dulness on percussion, and pectoriloquy, and every other sign of incipient phthisis. He applied, and long wore, the alcoholic lotion, called it his "breast-plate," and is now a professor of ——— College.

A lady, about thirty years of age, became affected with hæmoptysis. She was enjoined the alcoholic lotion. It is fourteen years since it was first applied, and it is continued, or renewed, if ever suspended, to this day.

I saw a young lady two years ago, one of a most consumptive family, affected with hæmoptysis, with every threatening sign and symptom of incipient phthisis. I prescribed the alcoholic lotion, and the cough and hæmoptysis were removed, and every fear dispelled. It had already been proposed that this young lady should take a voyage to Madeira. She did so, continuing the lotion, and returned in apparent good health.

Three months ago a young lady was brought to me, having

a recurrence of hæmoptysis. There were pectoriloquy and dulness under the right clavicle, cough, loss of color, and of flesh. The alcoholic lotion was applied. The hæmoptysis and cough ceased. The patient went to Hastings, and every account which I have received has been one of improved health.

I give these cases as examples. I do not imagine that the alcoholic lotion does more than *check* the morbid process. But—"Est quoddam prodire, tenus si non datur ultra."

In what the morbid processes of the deposition and the softening of tubercle consist, I believe we do not know; but if these processes be really checked by the application of the alcoholic lotion. we have a *practical* fact which must excite the deepest interest. Some degree of this influence, in incipient cases, is, I believe, exerted by this remedy.

None of the remedies ever yet proposed for phthisis has maintained the character first given to it. The encomiums bestowed upon them were always beyond the truth; I would, therefore, carefully guard against such an event in the present instance; and I would beg to be understood as stating only the fact that I have witnessed many, very many, cases of incipient phthisis checked by the strenuous application of the alcoholic lotion, and the patients restored to *apparent* health, these cases having been proved to be phthisis by the presence of the physical signs, as well as the morbid symptoms of this dire disease.

I would also guard my readers against trusting to this remedy as a sort of *cure* for phthisis. I think it the most important remedy in this disease which we possess; but I would by no means neglect *any* of the other well-known *aids* in the treatment of phthisis. Of these, changes of air; free exposure to the sea-breezes; a sea voyage; a mild climate; a chalky soil; a locality screened from the north-east winds; gentle exercises, especially on horseback; a meat diet, with a little of Bass's ale, perhaps, but otherwise without stimulus; the system of sponging with the sea water, or salt and water, or vinegar and water; light clothing, with flannel next the skin, &c., the plan recommended by the late Dr. Stewart, &c., constitute the additional remedies to be adopted in the treatment of phthisis."—*London Lancet.*

Liberia—its Fevers—Longevity of its Inhabitants.—At the semi-monthly meeting, May, 1st, 1844, of the Medical De-

partment of the National Institute, Dr. Lindsly, to whom the subject had been previously referred, presented the following abstract of a communication from James L. Day, A.M., M.D., late physician to the colony of Liberia in western Africa, and United States agent for taking care of recaptured Africans—and, on motion, the abstract was ordered to be published.

To the question, what has been the effect of agriculture, the felling and clearing off the forests, the draining and cultivation of the soil, upon the climate, upon the health of the inhabitants, and upon the character of disease?

He states that it is only about twenty-two years since the colony of Liberia was first established—that during that period something has been effected (quite as much as under the circumstances could be expected) in the cutting down of the forests, draining the swamps, and in cultivating the soil—and that owing to these improvements and the better modes of treating disease, the acclimating fever, as it is called, which attacks almost all the emigrants, is much milder in its character than formerly, seldom confining the colored man more than a few days, and then leaving him in perfect health—and very frequently not proving dangerous even to the white, in whom it is generally very easily controlled by the administration of appropriate remedies.

The endemic, commonly called the African or coast fever, originates no doubt from the malaria generated from the extensive mangrove swamps almost everywhere present along the coast, combined with that generated from the vegetation everywhere luxuriant and decaying with great rapidity in this warm country, especially in the season of the periodical rains. This once assumed the character of a malignant bilious remittent, rarely taking the milder form of intermittent or tertian agues. Recently, from the causes before suggested, when remittent it is more mild, and oftener it appears in the intermittent form. In general it yields readily to remedial agents, and it is found the best practice one in which mild mercurial cathartics are used by day and sedatives at night, avoiding the danger of bringing on, by drastic purgatives, fatal hypercatharsis—and likewise avoiding entirely the use of the lancet, except possibly sometimes it may be employed in cases of sailors of full plethoric habit. But even in such cases, Dr. Day remarks, he would resort to it with fear and reluctance. At the first intermission, and in some cases the first considerable abatement, without waiting for a distinct intermission of the febrile symptoms, after the system has been brought under the action of calomel, he gives the sulph. of

quinine, in doses of from five to twenty grains, according to the circumstances of the case. After having once prepared the system and commenced the use of the quinine, he remarks, he is rarely compelled by the return of the fever to stop it, except during the after part of the day, for the first or second day of its employment. It is continued in small doses for about three days, and then administered, dating from the interrupted paroxysm of the fever, on the sixth, thirteenth, and twentieth days thereafter, there being a constant tendency in such fevers at septemary periods.

What is the relative degree of health and longevity of the whites and blacks, the increase and mortality of each?

In answer to this question, Dr. Day remarks that he considers that the colored man, in emigrating to Africa from America, incurs much less risk to health and life than he would in going to Canada or the West Indies—that the cold of the former would produce more severe and more fatal diseases than are encountered in Africa, while the yellow fever of the West Indies, which is entirely unknown to Liberia, is much more dangerous than the mild acclimating fever to which the negro is liable upon landing in Africa. Upon the whole, he contends that the danger incurred by the colored emigrant is very slight indeed; and that even the white man is much less exposed than is generally imagined, many having lived in the colony four, five, six, seven and eight years in tolerable health, while many slave dealers have grown gray in the pursuit of wealth by their horrid traffic.—*Boston Med. and Surg. Jour., June* 12.

Physiological Effects of the Iodide of Potassium.—M. Ricord, who has had such large experience in the use of the iodide of potassium in different doses, has made valuable observations on its physiological action. The following may be regarded as a summary of these.

The *skin* is very readily affected by the iodide. as is shown in the frequent eruptions on the face and shoulders, and even other parts of the body, of those who have been subjected for some time to the influence of this medicine.

The *digestive functions* under the use of the iodide of potassium are generally quickened in their functions in a favorable manner; the appetite is increased, and a general fulness of frame is the frequent consequence. Under certain circumstances, however, this medicine may give rise to pathological

effects on the digestive passages. One of these, and the most remarkable and at the same time common, consists in a pain seated in the great curvature of the stomach, and which, as it is described by the patients, might be taken for a pleurodynic pain of the left hypochondrium. This pain is sometimes quite sharp, but without being accompanied by any augmentation of thirst or derangement of the appetite, or appearance of the tongue indicating any gastric derangement, or, finally, without there being any reactive excitement of the circulation.

Salivation.—In a great number of subjects, the iodide of potassium gives rise to a copious salivation, resembling that of pregnant women. The buccal mucous membrane is not inflamed. the salivary glands are not swelled, and the breath has not the fetor characteristic of mercurial ptyalism.

The *quantity of urine* is almost always increased, and often in a very remarkable manner, under the influence of the iodide of potassium.

The *circulation* has not appeared to M. Ricord to be sensibly affected by the iodide, but in some instances he thought that it rendered the blood less plastic, and gave rise to a predisposition to nasal and pulmonary, and sometimes to intestinal, hemorrhages. Sometimes it has given rise to a kind of ophthalmia, to which he proposes the name of edematous catarrh.

Under the influence of the iodide of potassium there often supervenes, as in simple coryza, obstruction in the nasal fossæ, sniffling, seldom sneezing; the mucous secretion is considerably increased; but the flux has this peculiarity, that it is commonly less viscous, and displays no tendency to pass into the purulent stage. Sometimes this variety of coryza is very annoying. Twice during the year (1843), the editor of the *Annuaire Therapeutique*, &c., whose description we are now following, says that it has been, within his own observation, accompanied by quite a severe cephalalgia, so as to cause alarm for the result; and yet the patients had not been taken more than fifteen grains of the iodide.

Sometimes the iodic coryza is succeeded by a peculiar kind of bronchitis, with cough and labored respiration.

The action of iodide of potassium on the *nervous system*, though of unfrequent occurrence, is quite remarkable. M. Ricord has seen to supervene, in some subjects, a little cerebral excitement and symptoms of a slight congestion, which have given rise to something analogous to the intoxication produced by alcoholic liquors. Occasionally spasmodic move-

ments and slight *subsultus tendinum* are seen.—***Bulletin Med. Sciences.***

Sir Henry Halford.—Among the notables of the profession who have lately paid the debt of nature, is Sir Henry Halford, whose career lasted half a century. His name originally was Vaughan, and as such was advantageously known in the medical world (of London). It was changed to Halford in consideration of a fortune. He was knighted by George IV., and would have been made a peer, could a precedent have been found for such an act. Lawyers are ennobled by the scores for all kinds of services; a man with a freehold in "fat acres," or who can command the representation of two or three boroughs, may also ingratiate himself with the minister of the day, and be made a peer; but for a physician or a surgeon, who may save the life of his sovereign by his skill, or the lives of thousands of his fellow subjects by his well-directed and timely applied knowledge, to become more than a mere baronet, would be preposterous. It is not so written in the book of precedents. A successful soldier of fortune may rise from an ensign to a duke, and take his seat in the House of Lords; but a well-educated and benevolent physician, whose endeavor it has been to save lives, to enlist the harmonizing influences in favor of his fellow-men, and by his skill and address to revive the drooping spirits of an entire army or a garrison, cannot hope for such honors.

Sir Harry Halford was a popular and fashionable physician, a man of moderate capacity and of respectable literary attainments. His manners and address gave him vogue, and tact was the word by which his friends and admirers expressed their opinion of his skill, when they dared not speak of his talents.

Dr. Paris has succeeded Sir Henry in the post of President of the College of Physicians.—*Ibid.*

THE WESTERN JOURNAL.

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NEW SERIES.—VOL. II.—NO. III.

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LOUISVILLE, SEPTEMBER 2, 1844.

TRAVELING LETTERS FROM THE SENIOR EDITOR.

NO. IV.

KANZAS RIVER, 'Indian Territory,'
August, 1844.

To my Colleagues:

GENTLEMEN:—I find that the time for dispatching a letter for our September number, has overtaken me at a place that will not admit of my giving you 'some account' of the far and ill-famed 'Black Tongue,' as I had intended to do; for as I passed up through St. Louis, unwilling to trust my southern notes to the treacherous Missouri, I deposited them in that city. I hope to return to them in time to give you a notice of that epidemic Erysipelas, for our October Journal. Meanwhile, I trust that some of our brethren who have encountered it, will send you the result of their experience.

Called upon to write from the FAR WEST, it would seem appropriate for me to say something on what immediately surrounds me, and I shall begin by giving you a page or two on

The Indians.

The tribes and fragments of tribes, which are found in this quarter, are the Shawanoese on the south side of the Kanzas, (or as it is here

familiarly called, the *Kau* river), and the Delawares, Wyandotts, Kickapoos, and Pottawatamies on the north, extending up the Missouri to a few miles above Fort Leavenworth. They are all more or less civilized, and have missionaries, teachers, and traders residing among them. As the game in this quarter is nearly destroyed they must work or starve. You might suppose that such a dilemma would spur them into active effort, but as it is a difficult matter to starve an Indian, not a few of them are as idle as a young doctor in the first year of his probation. They have, however, the advantage of him in this, that they look forward to a *certain*, though small, annual stipend from the Government, while he has no positive assurance of a good fee, when his year of waiting has expired. In another aspect of the matter, they are in much the same predicament—when the year has rolled round the debts of both generally swallow up their receipts. But as these remarks are by no means applicable to all our junior brethren, so they must not be applied to all our red brethren; for some of them are really industrious and thrifty. I visited a Kickapoo, who was comfortably lodged, had his plantation divided off with good fences into fields for corn, wheat, meadow, *truck* and, in imitation of a Missouri farmer, even hemp; while his lands and yards were well filled with cattle, horses, and hogs, which in the evening had returned from the neighboring woods and prairies, and made quite a show in his lane.

On examining the heads of three small children of this agricultural nabob, *Char-kee-ka*, (his name deserves to be recorded), I found them all flattened in the occipital region, so that they had lost the carinate and oval form, and assumed a cylindrical. This, the Indians present ascribed to the binding of them to a board, immediately after birth. The head is not bound, it is true, but as the board lies down, the weight of that extremity rests constantly on the occiput. The heads of most of the several adults present, presented something of the same compression; but when I went into another tribe, the Shawanoese, I found it much less. On the Kickapoo theory of this modification of the cranium, I shall not stop to offer any criticisms, and if either of you should kick up at it, I shall expect you to propose a better.

During the same afternoon, I saw two cases of half-formed cataract, two of pterygium, and, subsequently, one of strabismus, all in women and girls. A 'fine chance' for a young ophthalmic surgeon, *vulgo*, an oculist! I hope some of Professor Gross' pupils will find them out, especially the last, for an Indian girl has not quite beauty enough to afford to squint. By the way, the female offspring of the red and white varieties of our race, are not as comely as mulattoes and quart'roons, especially those of the Gallic mixture. In the compound of the Indian and Anglo-Saxon or Gallic blood, I have here abundant evidence. that the

dark color of the iris outlives that of the hair, as I meet with many examples of black eyes, with chestnut and even sandy hair.

The most prevalent Indian disease is scrofula. This is the testimony of those who have spent years among them. It has almost utterly extirpated the fragmentary tribe of Peorias, living on the sources of the Osage river. They generally died with cough and expectoration; but in many, it is limited to the lymphatic ganglia of the neck. In different schools and families I have had an opportunity of examining about 150 children, and find at least 12½ per cent., more or less, affected with that disease. While I was at the admirable Manual Labor School of the Methodist Episcopal Church, a Kanzas boy, laboring under pulmonary scrofula, suddenly expired of hæmoptysis. At the Baptist mission, among the Shawanoese, I saw a man with scrofula of the skin of his neck and breast, and in various places I have seen the eschars left after spontaneous cures.

At the risk of disappointing such of our readers as have no relish for any thing but medicine, I cannot refrain from saying a few words on the efforts making in this quarter to raise the tribes into a civilized condition. The Baptist Missionaries have chiefly aimed at the direct introduction of christianity; the Society of Friends, mainly at education in letters and the domestic arts; the Methodists at the whole, not successively, but simultaneously. It is impossible for me to doubt that this is the true method; and, while I cheerfully accord to all these denominations of christians, an equal degree of liberality, zeal, and self-denial, I am compelled to prefer the system of the latter. Till lately, they had four tribe schools, among the Peorias, Shawanoese, Delawares and Kickapoos, one each. They have abolished the whole, and formed one institution, a few miles south of the Kanzas river in the edge of a beautiful grove, nourished by half a dozen springs. Of an adjoining fertile and rolling prairie, they have enclosed 500 acres, three-fourths of which are cultivated by the labor of hired Indians, while the remainder is overspread with domestic animals. Several trades, including the manufacture of meal and flour by steam, are here carried on, to all of which Indian men or boys are parties; and show, as I witnessed, an encouraging degree of ingenuity and diligence. But the most interesting part of this establishment is the school, which embraces nearly 100 children and young persons, about two-fifths of whom are girls. In addition to spelling and reading, they learn writing, in which they make rapid progress, arithmetic, and music by note, evincing a talent for this latter accomplishment, much greater than has been ascribed to them. Through a part of every day, all the boys that are large enough work in the field, to learn agriculture and form habits of industry; while the girls, under a gifted and devoted matron, practice

housekeeping, spinning, weaving, sewing, and the labors of the dairy. Throughout the whole, there reigns as fine an aspect of cheerfulness, obedience, and propriety, as I have ever seen among an equal number of our own children. To this result christianity contributes a full share. Morning and evening devotional exercises are never omitted, and always embrace vocal music, in which the chidren unite; and on the Sabbath the whole attend 'Sunday school,' and afterwards the various exercises of the sanctuary; which, conducted in the fervent and exciting manner of the respectable sect to which the school belongs, are well calculated to rouse the Indian from his constitutional hebetude. Thus, the wants and desires of the whole man—physical, intellectual, and moral, are met by this establishment.

Several advantages are perceived to flow from substituting a central or federal, for the tribe schools. 1st. The children are further removed from the parents who are prone to allure them home. 2d. As they come from different tribes, who speak different languages, they more readily and willingly learn our own as the common medium of intercourse, which thus becomes to them what the Latin once was in Europe. 3d. The presence of a large number increases the excitement and interest of the whole. 4th. The exhibition of several of the useful arts tends to enlarge their minds.

But some of the gentlemen connected with this institution are meditating the re-establishment of the tribe schools, though in a different way from the old. They propose, as soon as practicable, to send back well qualified *Indian* teachers, male and female, to open schools among the tribes to which they belong, and thus relieve the central school from the necessity of receiving very small children. If this idea can be carried out, the effect cannot fail to be excellent.

I ought to state, that in discontinuing the tribe schools, the Methodists have not recalled their missionaries; but only relieved them from the duty of teaching, whereby they are left more at liberty to instruct those among whom they labor, in the precepts and principles of our holy religion, and to assist them, by their example and advice, in rural and domestic economy. In this way I found the Reverend gentleman who resides among the Kickapoos, actually employed a few days since. Another important object is effected by this class of laborers. Mingling constantly with the Indians, and acquiring their confidence, they are able to procure pupils for the central school, who might otherwise never even hear of it.

None of the tribes in this quarter, except the Wyandotts, have even the germ of an organized government, though they are not without certain usages which are perhaps pretty generally observed. The Wyandotts, as you know, lately went from the upper waters of the Sandusky

river, in the State of Ohio, and are settled immediately above the junction of the Kanzas with the Missouri river. *They* have an organized government with a body of written laws. The government consists of a president and six counsellors, elected annually, who combine the legislative, judicial, and executive functions. They are as destitute of lawyers as of doctors. In a criminal case, however, the culprit may choose some one to plead his cause. After conviction of murder, the whole proceedings are laid before the tribe for ratification or annulment. The mode of punishment is by shooting. As an example of economy I should state that the annual salary of a member of the Council is $50, that of the President $60. I fancy that if the salaries of our civil officers were modeled somewhat after these, we should not find quite so many of our brethren degrading themselves into politicians and civilians. I ought, in justice, to inform you, that this political system of which my limits will only admit this imperfect notice, was mainly invented by *Sum-men-do-wat*, a full blood and unlettered Wyandott.

As some of our readers may have heard of an extraordinary mortality among this nation last summer and fall, soon after they reached the mouth of the Kanzas, I may refer to it. About 80, out of between 600 and 700 died. They were chiefly children and aged persons, of unmixed blood. The diseases which destroyed them were mainly measles and diarrhœa. They were encamped and greatly exposed on the right bank of the Kanzas river, and lived on a very unhealthy diet. The reason why more Indians than half-breeds died, was because they took less care of themselves. When sick, the Indian and negro are very much alike. Many of the mixed families of this tribe are intelligent and highly respectable.

But I must stop, or you will think I have become as wild as the wilderness in which I roam, and have forgotten that I am writing for a *medical* journal. I will leave the Indians, then, though not the Indian country, till I have given you a page on another topic, which, perchance, may turn out to be a little more professional. But what shall be its title? * * * * * Well! here it comes—rather long, you will say, but I can't make it shorter.

Trips into the farther West by Invalids.

It is well known, that from the bed of the Mississippi to the base of the Rocky Mountains, through an average of 20 deg. of longitude, there is a general ascent, till the western edge of the great inclined plain, in the latitude of 42 to 43 deg., according to Lieut. Fremont, attains the altitude of 7,000 or 8,000 feet above the level of the sea, or about 16 times that of Cincinnati, Louisville, and St. Louis. From this elevation, the mountain range, which divides the waters of the Pa-

cific from those of the Atlantic, rises 4,000 or 5,000 feet higher, having its summits covered with perpetual snow, and consequently condensing the vapors, brought by the west wind from the former ocean. The rivers which meander through this largest of all prairies, are chiefly the Platte, the Kanzas, and Arkansas, in the latitudes of Ohio, Kentucky, and Tennessee. It is mainly along them and their tributaries that any woodlands are to be seen; everywhere else the traveler meets only with such herbaceous plants and grass, as delight in a thrifty soil. At certain times, copious rains fall on this region, but a sandy soil soon imbibes them, and dews are consequently sparing; while permanent swamps and marshes are almost unknown. In fact the air and earth are dry and comparatively free from fogs, musquitoes, and malaria, after we have ascended the inclined plain a few hundred miles from the right bank of the Missouri river.

Such is the outline of the boundless savannahs on which, in these latter days, some enterprising invalids have sought for that health which our polypharmacy had failed to impart.

The gates of entrance into this great field, are the mouth of the Kanzas, in the latitude of Cincinnati, and the mouth of the Platte, about two degrees further north, that is, in the latitude of 41° 02′ 11″. The routes are, along the latter river, in the direction of the South Pass to Oregon, and between the waters of the Kanzas and Arkansas, to Santa Fee and Lower California; there is, also, a road from the valley of the Kanzas, to that of the Platte. The mule is the camel of this desert. Equally adapted to the saddle and the harness, strong, hardy, healthy, not much of an epicure, and capable of subsisting on very little, he may be regarded as the *sine qua non* of the trader, traveler, and invalid in their wanderings over this woodless wilderness. The small mules are preferred to the larger, and females to males. I lately rode one a short distance, which had just brought her owner from California, and found that her sure, easy, and nimble walk, raised in me such an inclination to put off for the Rocky Mountains, that I prudently dismounted, especially as I was not provided with that indispensable implement of the traveler into this newest Far West, a good rifle.

Well, the arrangements are now made for the journey of health, but who are the invalids that may undertake it, with the hope of benefit? I answer: First. *Dyspeptics*, who by intemperance, gormandizing, idleness, or hard study have broken down their digestive organs. Second. *Hypochondriacs:* such as students of medicine who have been rejected after a third examination—unfortunate speculators, who are unwilling to work, and want time for meditation on future schemes—disappointed office hunters, who have cracked their voices in proclaiming their merits to the people, and dismissed office holders, who would oth-

erwise make a 'voyage up Salt River.' Third. Those who labor under chronic hepatitis and jaundice. Fourth. *Consumptives*, who are not too far advanced to take the saddle.

Let us now inquire for a moment into the circumstances from which the proposed benefits will result. 1st. Extrication from the luxuries and dissipations of society. 2d. The regular and long-continued exercise. 3d. The reduced and simple diet. 4th. Lodging on the ground, amidst the short grass. 5th. The constant immersion of the body in a dry unmalarious, and invigorating atmosphere. 6th. The exercise of the senses on new objects and scenes. 7th. The excitement connected with the danger of being lacerated by the bullets of the *Pawnees;* pierced to death by the arrows of the *Blackfeet*, or picked to death by the *Crows.*

Possessing these active qualities, a trip to the Rocky Mountains cannot fail, in numerous cases, to accomplish more than every other remedy, and I beg leave to commend it to all who are interested, as a measure that will either kill or cure.

The Inundation.

Having seen the great flood, or its desolating effects, from New Orleans to Fort Leavenworth, a distance of 1600 miles, I should be somewhat prepared to speak of it, if my notes were not at St. Louis. Howbeit, I will send you a few memorandums from memory that our journal may not be altogether without a record of this memorable event.

When I left New Orleans, on the 18th of May, the Mississippi was high and still rising, chiefly from the waters of Red River and the Arkansas; both of which had been swollen far above their usual elevation; destroying many plantations, which had never before suffered from inundation. As I slowly ascended the great river through the month of June, it was still rising, for then the waters from the upper rivers were coming down in unwonted volumes. In some places, new levees had given way, and the cotton fields were deluged, as the currents sought an outlet through the Tensas and Washita into Red River, which had then partially emptied itself. At Vicksburg on the 4th of July, the surface of the river had been for about a week at the same height. In ascending the Yazoo, which enters the Mississippi 12 miles above that city, the river was only known by the winding vista through the groves of cotton wood, for the waters spread off indefinitely on both sides, except where the channel happened to lie near the tertiary bluffs to the south. Before reaching the mouth of the Arkansas, we observed that the flood had begun to subside, but were never out of sight of lateral currents, flowing off more copiously to the west than the east. In general they were not so deep as to wash away the fences; but exerted on the corn and cotton a pernicious influence, and subjected the inhabitants

to great loss and inconvenience. Above New Madrid, for one stretch of 15 or 20 miles, there was an uninterrupted current departing for the lower grounds, the bayous, lagoons, and lakes, through which the St. Francis makes its way, nearly parallel to the Mississippi, into the Arkansas. On reaching the mouth of the Ohio, on the 11th or 12th, we found the subsidence still more conspicuous. From thence to St. Louis, the drowned lands were reappearing, but in many places the waters were still flowing over banks which they rarely surmount. The desolations on this portion of the river were most melancholy, and indicated a higher flood than what had occurred below the mouth of the Ohio. All the fences were, in whole or in part, swept away; small framed houses, and the framed roofs of log houses, were lodged among the cotton trees, larger houses still had currents running through them, and some were tied to trees with ropes, to prevent their floating off. The inhabitants had all fled; and the only domestic animals, which I saw on any alluvial plantation, for 200 miles, were two flocks of geese! Even the leaves of many of the forest trees and shrubs, (the species I noted at the time, but cannot recount them from memory), had changed to a yellow hue and begun to fall. The cotton tree was alone seen to be green and growing in the midst of this 'watery waste.' In ascending the Missouri to Fort Leavenworth, about 400 miles, a scene of still greater devastation met the eye. For the torrent had been more copious and rapid, the drifting sands more abundant, and the quantity of floating timber much greater. By these agencies every plantation on the river bottoms was nearly destroyed. In many places, large slices of bank with their houses and barns were cut away, the fences entirely carried off, and almost every remaining vestige of art buried up beneath sand and wood. Of course this avalanche of drift generally rests near the margin of the banks, though in many instances it is spread over the entire plantation, which is thus reduced to utter sterility. Such is the aspect of either bank of the Missouri as far as I ascended that river. Of the condition of those of the upper Mississippi I can say nothing from personal observation. It is affirmed by many persons that this is the greatest flood which has appeared in these latitudes since the year 1785. Should it not be visited by another for the next sixty years, that long period would not be sufficient to restore some plantations to their late fertility.

It will be inferred from what has been said, that the Lower Mississippi did not rise as high as the middle, and such was the fact. Nor did the Upper Missouri experience the same swell as the portion of which I have spoken. From the best accounts I have been able to obtain, there was no remarkable rise above the Platte, which, flowing nearly east, enters the Missouri 300 miles above Fort Leavenworth;

and even above that post, the rise was less than below. Thus it was not the descent of melted snows through the Upper Missouri and its great tributary, the Yellow Stone, but the fall of rains in a region south of the sources of the latter, that deluged the vallies of Red River, the Arkansas, Kanzas, and the Little Platte, and the great Osage of the State of Missouri. While this was going forward, Louisiana, Alabama, Mississippi, Tennessee, and Kentucky appear in no degree to have suffered. In fact, throughout the months of April and May the maritime portions of the three former, actually suffered from drought, to such a degree, that in Louisiana, the sugar planters on the first of June were irrigating their plantations, by cutting trenches through the levees, that the waters of the swollen Mississippi might escape upon them. On the 14th of that month, the flood in the Missouri, opposite where I now am, was at its height, showing, conclusively, that great rains had fallen to the west, while in the south there had been none. It should be borne in mind, however, that June is the time for the annual rise of the Upper Mississippi and Missouri, which rivers were, therefore, in a state of repletion, at the time when the western tributaries of these middle latitudes, threw out their desolating torrents. Deprived of the opportunity of seeing newspapers, I am not informed as to the extent of this rainy zone to the east, but have understood that the Illinois rose to a great height, and if so, the region of excessive rain, extended, perhaps, from the Rocky Mountains to Lake Erie.

Will the time ever come, when the Missouri and Mississippi will no longer overflow their banks? When, between deposits made upon them and the excavation of their channels, the latter will become sufficiently capacious to contain all the waters which may press into them? This question, I think, must be answered in the negative. It is true, that every flood raises their banks and bottom lands, but it also raises their beds. And this must be the case with all alluvial streams, for they continually bring down and deposit sand and other drift in their channels. Thus it is, that the valleys fill up, while the channels of the rivers flowing along them, retain the same capacity. The beds rise with the banks, and the whole stream comes to occupy a higher level.

There is a great difference, in its effect on the fertility of the soil, between an inundation by the Missouri, and one by the Lower Mississippi; for as sand is borne along with difficulty, it is deposited above, while clay, marl, and comminuted plants are carried on and made to fertilize the more distant regions.

Will the late inundation be followed by great autumnal sickness? Time will tell us. Meanwhile I may remark, that among the scattered population about the mouth of the Kanzas, there are at this date, August 7th, more than 20 cases of intermittent fever, generally, how-

ever, of a mild character. I might say more on this subject, but, unwilling to inundate you with ink, will forbear.

And yet I cannot close, without touching on some other matters. I had hoped, that I might find on the banks of the Kanzas, some plants that would be new to our respected friend and colleague, Professor Short; but am disappointed. Identity of latitude, soil, and elevation, gives such perfect identity of vegetation, at a distance of 1,000 miles, as would greatly strengthen our venerable friend, Professor Caldwell, if he could witness it, in his opinions on spontaneous production.

A word on Ornithology, and I am done. In days long gone by, the *Paroquet* enlivened the embowering forests of the banks of the Ohio, as far up as Cincinnati; but its green plumage no longer emulates the foliage of the woods. Nor did I last spring in the south-west, nor this year in that region, or in ascending t / the Mississippi, once hear its unmelodious note. Here, however, it has greeted me many times, and flocks are frequently seen flitting among the green trees. Thus, like the Indian, this native bird is retiring to the west, and with him, melancholy thought! may at last become extinct. To this retirement, the noisy and smoking steamboat has no doubt contributed a full share; as the Paroquet delights to dwell in the neighborhood of quiet and shady valleys. With this *feathering* out, I shall conclude, by subscribing myself

Your friend and colleague,

D. D.

THE WESTERN LANCET.

We received the Western Lancet, for July, after the matter for our present number had been composed, and just as the last sheets were going to the press. It contains a personal attack upon us, which the author himself, Dr. Peter, seems to regard as rather 'uncourteous.' We have no space left us, at present, if we had the disposition, to embark in a personal quarrel with that gentleman. But we must tell him, that he has been miserably hoaxed, if he has credited any story of our 'watching stages and steamboats, and *besetting* students of medicine.' True, we have occasionally met with students on their way to Lexington, and, as the subject naturally came up, have not hesitated to tell them what we knew about the means of instruction, and the character of some of the professors there. If Dr. P., and some of his colleagues have not made quite as free with the Faculty of the Medical Institute, both in public taverns, and in their lectures, their pupils have done them

great injustice. For ourselves, we have been obliged, on more than one occasion, in self-defence, both to write and speak with some plainness of Dr. Peter and one of his colleagues, and it seems that we shall have that unpleasant duty again to discharge in relation to the former. At present, all we have room to say is, that his accusation of 'watching stages and steamboats for students, and besetting them with *plausible inducements*,' so far as it implicates us, is false. Y.

MEDICAL LECTURES.

The lectures in the *Louisville Summer School of Medicine* are resumed to-day, and will be continued without interruption till the last of October. Clinical lectures will be delivered on each Wednesday and Saturday, at the Louisville Marine Hospital, and on every other day in the week, Sabbaths excepted, three lectures on the various branches of the profession will be delivered in the rooms of the Medical Institute. The charge for this course of lectures is $15. The Hospital presents at this time much that is interesting to Students of medicine. Dr. Bayless will open the dissecting rooms the first of October, and the most desirable opportunities will be afforded for prosecuting practical anatomy.

BOOKS RECEIVED.

Cyclopædia of Practical Medicine, parts viii., ix., x. Dunglison's Elements of Hygiene Wilson's Human Anatomy. The Superstitions connected with Medicine and Surgery, by Thomas Joseph Pettigrew, F.R.S., &c. Moreau's Practical Treatise on Midwifery. Druitt's Modern Surgery. The American Journal of Insanity, No. I. We have barely room to acknowledge the receipt of these works, at present. They will be noticed hereafter.